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Reporting from Parties not included in Annex I to the Convention
Work of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention

Progress report on the work of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention

Note by the secretariat*

Summary

This report summarizes the proceedings and outcomes of the three meetings held by the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) in 2014. During these meetings, the CGE developed its 2014–2018 work programme, revised its rules of procedure and took stock of the progress made in the implementation of the work programme in 2014. The group also assessed the achievements and lessons learned in implementing its work programme and provided relevant recommendations.

* This document was submitted after the due date in order to take into account the outcomes of the 13th meeting of the reconstituted Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention, held in Yerevan, Armenia, on 11 and 12 September 2014.

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I. Introduction

A. Mandate

1. The Conference of the Parties (COP), by decision 19/CP.19, continued the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) for five years, from 2014 to 2018.

2. The COP decided that the CGE, in fulfilling its mandate, shall function in accordance with the revised terms of reference contained in the annex to that decision. It requested the CGE to develop, at its first meeting in 2014, a work programme for 2014–2018.

3. The COP, also by decision 19/CP.19, requested the CGE to submit a progress report annually on its work to the Subsidiary Body for Implementation (SBI) for its consideration at the sessions of the SBI which are held in conjunction with the sessions of the COP.[1]

4. By the same decision, the COP requested the secretariat to facilitate the work of the CGE by organizing its meetings and workshops and compiling reports of its meetings and workshops for consideration by the SBI.[2]

5. The secretariat was requested by the same decision to publish a list of the members of the CGE, including their respective area of expertise and experience relating to national communications (NCs) and/or biennial update reports (BURs), and to notify the SBI of such appointments. The list is published on the UNFCCC website.[3]

B. Scope of the note

6. This report contains a summary of proceedings of the 11th, 12th and 13th meetings of the CGE.

7. At these meetings, the CGE formulated its work programme for 2014–2018,[4] discussed the progress made in the implementation of its work programme for 2014, agreed on the organization of its work for the last quarter of 2014 and held preliminary discussions on its workplan for 2015.

8. In addition to this report, four reports capturing the outcomes of the key activities of the CGE undertaken in 2014, complementary to those conducted under the work programme in 2014, have been prepared for consideration at SBI 41:

(a) Report on the regional training workshops on the preparation of BURs from Parties not included in Annex I to the Convention (non-Annex I Parties) (see paras. 27–29 below);[5]

(b) Report on the workshop on peer review of the materials for training the team of technical experts (see para. 33 below);[6]

[1] Decision 19/CP.19, paragraph 7.
[2] Decision 19/CP.19, paragraph 9(a).
[3] <www.unfccc.int/2884.php>.
[4] The work programme of the CGE for the period 2014–2018 is contained in annex I.
[5] FCCC/SBI/2014/18.
[6] FCCC/SBI/2014/19.

(c) The long-term strategy of the CGE (see paras. 36 and 37 below);[7]

(d) Technical report on problems and constraints as well as lessons learned and best practices in the process of and preparation of NCs and BURs by non-Annex I Parties (see paras. 16–18 below).[8]

C. Possible action by the Subsidiary Body for Implementation

9. The SBI, having considered this document and the four reports referred to in paragraph 8 above, is invited to take note of the work programme of the CGE for 2014–2018 and the progress of its implementation in 2014, and provide further guidance on it, as appropriate, to the CGE.

10. In addition, the SBI may wish to invite developed country Parties included in Annex II to the Convention and other developed country Parties in a position to do so to provide financial resources to enable the CGE to implement the activities planned in accordance with its work programme, and to invite multilateral programmes and organizations to collaborate with the CGE, as appropriate, in the provision of technical support to non-Annex I Parties in preparing their NCs and BURs.[9]

II. Meetings of the Consultative Group of Experts

11. The CGE conducted three meetings in 2014, the key activities of which included the development of its 2014–2018 work programme, the revision of its rules of procedure[10] and the stocktaking and review of the progress of implementation of the activities planned in the work programme.

12. The 11th meeting of the CGE, in which 20 members participated,[11] was held in Bonn, Germany, on 20 and 21 January 2014, with the objective of developing a work programme for 2014–2018, in accordance with the revised terms of reference of the CGE. At that meeting, Mr. Fei Teng (China) was elected as the Chair of the CGE and Ms. Rhianna Neely (Bahamas) as the Rapporteur, both for a term of one year.

13. During the meeting, the CGE responded to a number of mandates set out in decision 19/CP.19, as follows:

(a) The group discussed, revised and adopted its rules of procedure in the light of decisions adopted at COP 19,[12] relating to the work and function of the CGE;[13]

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[7] FCCC/SBI/2014/INF.15.

[8] FCCC/SBI/2014/INF.16.

[9] The estimated resource requirements to implement the CGE work programme for 2015–2018 is contained in annex II.

[10] The revised rules of procedure of the CGE are available at <http://unfccc.int/files/national_reports/non-annex_i_natcom/cge/application/pdf/revised_rules_of_procedure_cge_2014.pdf>.

[11] Members from the Bahamas, Belgium, Brazil, Canada, China, Colombia, the European Union, Gabon, Japan, Kenya, Maldives, the Netherlands, Pakistan, Peru, Saudi Arabia, the United Republic of Tanzania and the United States of America participated in the meeting, as well as three experts representing international organizations (the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and the Intergovernmental Panel on Climate Change).

[12] Decision 19/CP.19, annex, paragraph 4.

[13] The revised rules of procedure of the CGE are available at <http://unfccc.int/files/national_reports/non-

(b) The COP requested the CGE to develop at its first meeting in 2014 a work programme for 2014–2018, taking into account, when defining and implementing the work programme, other relevant work by expert groups under the Convention to avoid duplication. In response, the CGE developed a two-tiered, broad work programme covering the whole mandated term of five years, and a more detailed annual workplan for 2014.[14] The group decided that its work programme will be reviewed and revised on an annual basis, starting from 2015, in order to take into account the progress of implementation of the planned activities, as well as the relevant elements from the long-term strategy of the CGE[15] developed in 2014 (see para. 36 below).

14. The 12th meeting of the CGE was held in Bonn on 3 and 4 April 2014. The meeting was attended by 21 members of the CGE,[16] as well as an observer from Azerbaijan, representing non-Annex I Parties from the Eastern European region, who was invited in accordance with the conclusions of COP 19.[17] The 13th meeting of the CGE was held in Yerevan, Armenia, on 11 and 12 September 2014; 16 members the CGE[18] participated in this meeting.

15. At these meetings, the CGE elaborated on the operational details of some of its key planned activities. It also took stock of the progress made on the implementation of the work programme in 2014 and engaged in preliminary discussions of its workplan for 2015. The progress of the planned activities for 2014, including the operational details of some of the key planned activities, is described in detail below.

III. Progress of implementation of the workplan for 2014

A. Compilation of information on problems and constraints, lessons learned and best practices

16. The CGE, in accordance with decision 19/CP.19, annex, paragraphs 2(a) and (g), agreed to prepare a technical report compiling and synthesizing available information on the problems and constraints, lessons learned and best practices in the process of and preparation of NCs and BURs by non-Annex I Parties.

17. The report will inform the work of the CGE in the identification and provision of technical assistance to address the needs of non-Annex I Parties and serve as a source of lessons learned and best practices for non-Annex I Parties. The group also views this task as an area of possible opportunity for collaboration between the CGE and the Global Support Programme for Preparation of National Communications and Biennial Update Reports by non-Annex I Parties (hereinafter referred to as the Global Support Programme), a project funded by the Global Environment Facility (GEF) and jointly administered by the

annex_i_natcom/cge/application/pdf/revised_rules_of_procedure_cge_2014.pdf>.

[14] The draft detailed workplan of the CGE for 2014 is available at <http://unfccc.int/files/national_reports/non-annex_i_natcom/cge/application/pdf/cge_workprogramme_2014.pdf>

[15] FCCC/SBI/2014/INF.15.

[16] Members from the Bahamas, Belgium, Brazil, Canada, China, Colombia, Ethiopia, the European Union, Gabon, India, Japan, Kenya, Maldives, the Netherlands, Peru, Saudi Arabia, the United Republic of Tanzania, the United States of America and Uruguay participated in the meeting, as well as two experts representing international organizations (UNDP and UNEP).

[17] See document FCCC/CP/2013/10, paragraph 131.

[18] Members from Algeria, the Bahamas, Belgium, China, Colombia, the European Union, Gabon, India, Japan, Kenya, Maldives, the Netherlands, Pakistan and Saudi Arabia participated in the meeting, along with two experts representing international organizations (UNDP and UNEP).

United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP).

18. The CGE, as reflected in the work programme for 2014–2018, will update this technical report on a periodic basis, and will continue providing technical advice and support to Parties, upon request, on this theme.

B. Translation of the training materials on the preparation of biennial update reports

19. The CGE translated its training materials on the preparation of BURs into Arabic, French and Spanish. The translated training materials were made available to Parties through the UNFCCC website.[19] Subject to the availability of resources, the CGE plans to translate the training materials into the remaining official United Nations languages in 2015.

C. Update of the Consultative Group of Experts training materials

20. The CGE, as a part of its work programme for 2014–2018, agreed to update the existing CGE training materials[20] on NCs (covering greenhouse gas inventories, vulnerability and adaptation assessments and mitigation assessments), which were updated in 2011 and in 2012. These training materials are designed to facilitate the preparation of NCs by non-Annex I Parties in accordance with the "Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention".

21. The planned update intends to take into account the recent developments under the Convention as well as the latest science, in particular, the findings of the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report, which became available in 2013 and 2014.[21]

22. The CGE agreed to commence the update of its training materials on vulnerability and adaptation assessments in 2014, and to complete the task ahead of the planned regional hands-on training workshops on vulnerability and adaptation assessments in 2015.

23. At its 12th meeting, the CGE identified the nature and scope of the elements of the existing training materials on vulnerability and adaptation assessment that warrant further updating, based on which the revision of the training materials will commence in 2014 and is expected to continue in the first half of 2015.

D. Development of the e-learning programme

24. SBI 37 welcomed the concept note prepared by the CGE on the e-learning programmes on the preparation of NCs from non-Annex I Parties and reiterated its request for the secretariat to develop the e-learning programme on the basis of that concept note.[22]

25. In response to that request, the secretariat developed an e-learning programme, a web-based online learning platform on the preparation of NCs from non-Annex I Parties based on the CGE updated training materials. A beta version of the e-learning programme was presented to the CGE at its 13th meeting, for its review by October 2014. The release of

[19] The translated materials are available at <http://unfccc.int/7915.php>.
[20] The training materials are available at <http://unfccc.int/349.php>.
[21] The IPCC reports are available at <http://ipcc.ch/report/ar5/index.shtml>.
[22] FCCC/SBI/2012/33, paragraph 22.

the full functional version of the e-learning programme is planned for December 2014, and will incorporate the feedback from the CGE.

26. The architecture of the e-learning programme is designed to facilitate flexibility for a subsequent, substantive revision and to include any new and additional content, such as information on BURs.

E. Regional hands-on training workshops on the preparation of biennial update reports

27. The CGE conducted two regional hands-on training workshops on the preparation of BURs: for the Latin American and Caribbean region, held from 16 to 18 July 2014 in Panama City, Panama, and for the Asia-Pacific and Eastern European regions, held from 8 to 10 September 2014 in Yerevan. The regional hands-on training workshop for the African region, originally planned to take place from 18 to 20 August 2014, in Lomé, Togo, was postponed because of the serious health concerns in Western Africa.

28. The objective of the workshops was to enhance the capacity of the national experts in using the "UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention" to facilitate the preparation of their first BURs. The workshops also served as platforms to exchange views, lessons learned and experiences relating to the process of and preparation of BURs.

29. At its 13th meeting, the CGE took stock of the proceedings of the workshops, and outlined some areas for further improvement on the organization and delivery of such workshops in the future. The summary of the workshop proceedings, including recommendations for further improvements on the organization and delivery of such workshops in the future, are contained in the report referred to in paragraph 8(a) above.

F. Development of the training programme for the team of technical experts

30. The COP, by decision 20/CP.19, adopted the composition, modalities and procedures of the team of technical experts. It requested the CGE to develop and organize appropriate training programmes for nominated technical experts taking into account annexes III and IV to decision 2/CP.17, based on the most up-to-date training materials of the CGE.[23]

31. When defining its work programme for 2014, the group decided to develop and conduct a training programme for technical experts nominated to the UNFCCC roster of experts to enable them to participate in the technical analysis of BURs, including a technical annex on results-based activities relating to REDD-plus[24] submitted by developing country Parties seeking to obtain and receive payments for results-based actions.

32. The training programme is structured to cover two broad themes:

(a) The objective, principles and provisions of the Convention, and the decisions of the COP relating to the submission of NCs and BURs by non-Annex I Parties and the conducting of the international consultation and analysis of BURs;

[23] Decision 20/CP.19, paragraph 4.

[24] Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

(b) The approaches involved in preparing NCs and BURs using appropriate guidelines and guidance documents to support the understanding and analysis of BURs.

33. The draft materials prepared for the training programme will be peer-reviewed by a group of national experts, from both Parties included in Annex I to the Convention and non-Annex I Parties, involved in the process of and preparation of national reports, at a workshop to be held on 26 and 27 October 2014 in Bonn.[25] The workshop will continue on 28 October 2014 as a CGE members only event, where the CGE will take stock of the comments received at the preceding two days of the workshop and agree on a way forward that addresses those comments.

34. Based on the feedback from the peer review workshop, the CGE plans to finalize the training materials at the latest by November 2014.

35. Subject to a sufficient number of experts nominated to the UNFCCC roster of experts participating in the technical analysis of BURs and being available to undertake the course, the CGE plans to organize the initial training programme and the proficiency assessment for the nominated technical experts in the first quarter of 2015. The CGE requested the secretariat to prepare a concept note addressing the full spectrum of the delivery and conduct of the training programme and the proficiency assessment.

G. Long-term strategy of the Consultative Group of Experts

36. The CGE developed a long-term strategy for the period 2015–2018, which emanated from one of the recommendations contained in the progress report of the CGE to SBI 39. The CGE recommended that the strategy could address, among other matters, the following:

(a) A long-term management plan to enable the efficient and sustainable implementation of the work programme;

(b) A communication and outreach strategy;

(c) Cost-effective and comprehensive tools to provide technical assistance to non-Annex I Parties;

(d) Options and ways to engage key stakeholders in supplementing the efforts of the CGE.

37. In developing its strategy, the CGE also agreed to explore options and ways to enhance the provision of technical assistance to non-Annex I Parties at the regional, subregional and national levels.

H. Progress in the implementation of paragraph 2(d–f) of the terms of reference of the Consultative Group of Experts

38. The CGE planned to implement activities in response to paragraph 2(d–f) of its terms of reference for its 2014 work programme.

39. In response to decision 19/CP.19, paragraph 2(d), the CGE planned to revisit its previous recommendations on the elements to be considered in a future revision of the "Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention."[26] The recommendations to be considered in a future revision of

[25] FCCC/SBI/2014/19.

[26] See documents FCCC/SBI/2011/5/Rev.1 and FCCC/SBI/2011/5/Add.1.

these guidelines and of the "UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention" are perceived as important elements of the CGE work programme, and as such, the group saw a benefit in conducting another round of surveys to complement information collected in the survey on the problems and constraints, lessons learned and best practices in the process of and preparation of NCs, which was conducted in 2014 for non-Annex I Parties.[27] This activity will be prioritized and undertaken as early as possible in the last and first quarters of 2014 and 2015, respectively.

40. In the light of its significant workload resulting from the implementation of some of the key activities under its work programme that need to be completed by 2014 as mandated by the COP, the CGE agreed that, owing to insufficient time and resources to complete the activities identified in paragraph 35 above by the end of 2014, it would address them at the group's first meeting in 2015.

IV. Cooperation with other expert groups and other constituted bodies under the Convention and with intergovernmental organizations, and participation in other relevant mandated activities under the Convention

A. Other expert groups and other constituted bodies under the Convention

1. Executive Committee of the Warsaw International Mechanism

41. The COP, by decision 2/CP.19, established the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts under the Cancun Adaptation Framework, subject to review at COP 22, to address loss and damage associated with impacts of climate change, including extreme events and slow onset events, in developing countries that are particularly vulnerable to the adverse effects of climate change. The COP decided that as an interim measure, the Executive Committee of the Warsaw International Mechanism would consist of two representatives from each of the following bodies under the Convention, ensuring a balanced representation between developed and developing country Parties: the Adaptation Committee, the Least Developed Countries Expert Group (LEG), the Standing Committee on Finance, the Technology Executive Committee and the CGE. The COP invited the Executive Secretary, in consultation with the President of the COP, to convene the initial meeting of the Executive Committee by March 2014.

42. The CGE nominated Ms. Hilary Hove (Canada) and Mr. Thiago de Araujo Mendes (Brazil) as the representatives of the CGE to serve on the interim Executive Committee.

43. The CGE, through its representatives, briefed the first meeting of the Executive Committee, held from 25 to 28 March 2014 in Bonn, on the activities undertaken by the CGE relating to vulnerability and adaptation assessments.[28] The CGE noted that providing the Committee with this information presents an opportunity to foster a closer collaboration in undertaking vulnerability and adaptation assessment related activities in the future.

2. Least Developed Countries Expert Group

44. A member of the CGE, Mr. Kamel Djemouai (Algeria), participated in the NAP Expo, held on 8 and 9 August 2014 in Bonn, which was organized by the LEG with the support of the secretariat. The NAP Expo provided a platform for exchanging experiences, lessons learned and gaps and needs in adaptation planning, as least developed countries and

[27] See document FCCC/SBI/2014/INF.16.
[28] FCCC/SB/2014/4.

interested developing countries undertake the process to formulate and implement national adaptation plans.[29]

45. The CGE noted that its participation in the activities of other expert groups is important in helping to link the various activities which are cross-cutting in nature and to explore opportunities for conducting activities jointly and/or complementing each other's work. The group therefore recommends exploring an opportunity for a joint CGE and LEG event on issues relating to reporting on the vulnerability and adaptation assessment chapters of NCs and national adaptation plans and any other linked issues, including the means of implementation.

3. Third meeting of the Durban Forum

46. A CGE member, Ms. Hove, participated in the 3rd meeting of the Durban Forum for in-depth discussion on capacity-building, which was held during SBI 40, on 12 and 13 June 2014. It was designed as a platform for sharing information on ongoing activities and good practices on capacity-building. The meeting was attended by over 240 representatives of Parties, intergovernmental and non-governmental organizations and academia, who shared information and experiences relating to the enhancement and/or creation of an enabling environment and on the assessment of options for and the implementation of mitigation and adaptation measures.

47. The CGE presented its work on the technical assistance it provides to non-Annex I Parties in the preparation processes for NCs and BURs, including on issues relating to the establishment and maintenance of the sustainable national institutional arrangements that are required for the effective preparation of these reports. The involvement of the CGE, as referred to in paragraph 29 above, in the preparation of training materials for the team of technical experts to conduct the technical analysis under the international consultation and analysis process, was also highlighted.

48. The report on the meeting[30] was made available to Parties and other stakeholders who may wish to use the information contained in the report in addition to the information gleaned from the presentations and statements delivered during the meeting, when planning, designing and implementing their capacity-building activities for developing countries. The information contained in the report may be used by the CGE, in performing its mandated functions, to inform its deliberations on matters related to capacity-building.

B. Participation in other relevant mandated activities under the Convention

1. Technical assessment of submissions from Parties on proposed forest reference emission levels and/or forest reference levels

49. The guidelines and procedures for the technical assessment of submissions from Parties[31] on proposed forest reference emission levels and/or forest reference levels were adopted at COP 19.[32] Parties, in particular developed country Parties, and relevant international organizations were invited to support capacity-building in relation to the development and assessment of forest reference emission levels and/or forest reference levels, taking into account the work of the CGE.

[29] See document FCCC/SBI/2014/INF.14.

[30] FCCC/SBI/2014/14.

[31] More information on submission from Parties is available at <http://unfccc.int/8414.php>.

[32] Decision 13/CP.19.

50. By the same decision, the CGE was invited to nominate one of its experts from a developing country Party with relevant expertise to participate in the technical assessment as an observer.

51. Ms. Estefania Ardila Robles (Colombia) was nominated to participate as an observer in the first session of the technical assessment, which was held from 25 to 29 August 2014 in Bonn.[33]

52. The CGE expressed its appreciation of the opportunity to participate in this event as an observer and noted that its involvement had been productive, and had contributed to enhancing its knowledge and understanding on forest reference emission levels and/or forest reference levels.

C. Intergovernmental organizations

1. Global Support Programme for Preparation of National Communications and Biennial Update Reports by non-Annex I Parties

53. In 2014, the CGE representatives from UNDP and UNEP regularly updated the CGE at its meetings on the implementation of the Global Support Programme, which has the overall objective of providing logistical and technical support to non-Annex I Parties with a view to facilitating the timely preparation and submission of their NCs and BURs, and the preparation and submission of intended nationally determined contributions.

54. The Global Support Programme will rely on national and international experts and strategic partnerships with relevant initiatives and international organizations. The CGE noted that there is great opportunity for collaboration and coordination between the CGE and the Global Support Programme, given that:

(a) The implementation time frame of the work programme of the CGE coincides with that of the Global Support Programme;

(b) Both aim to support non-Annex I Parties in the preparation and submission of NCs and BURs;

(c) They address similar substantive themes and target the same groups of national experts.

55. The UNDP component of the Global Support Programme will be based in Istanbul, Turkey and the UNEP component in Nairobi, Kenya.

2. Intergovernmental Panel on Climate Change

56. The Technical Support Unit of the IPCC Task Force on National Greenhouse Gas Inventories collaborated with the CGE and the secretariat in giving presentations at the regional hands-on training workshops on the preparation of BURs and on the development of materials for the team of technical experts training programme referred to in paragraphs 30 and 35 above, outlining the key differences between the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* and the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*.

3. Global Environment Facility secretariat

57. A representative of the GEF secretariat participated as a resource person in the regional training hands-on workshop for the Latin American and Caribbean region on the preparation of BURs, referred to in paragraph 27 above. The GEF secretariat addressed the

[33] FCCC/TAR/2014/BRA.

procedures involved in accessing funds for the enabling activities from the GEF, including for the preparation of NCs and/or BURs.

V. Planned events of the Consultative Group of Experts in 2015

58. In accordance with its work programme for 2014–2018, in 2015 the CGE will organize three regional hands-on training workshops on vulnerability and adaptation assessment. These are in addition to the planned regular meetings of the CGE. The CGE will also organize the postponed hands-on training workshop for the Africa region referred to in paragraph 26 above.

59. The tentative venue and dates for the planned events in 2015 are contained in the table below, which is the basis for the secretariat to initiate the necessary administrative, logistical and technical arrangements and support.

Tentative venues and dates for the planned events of the Consultative Group of Experts for 2015

Event	*Venue*	*Date*
14th meeting of the CGE	Bonn	29 and 30 January 2015
Hands-on training workshop on the preparation of BURs for the African region	TBD	23–25 February 2015
Hands-on training workshop on vulnerability and adaptation assessments for the Asia-Pacific and Eastern European regions	TBD	29 June to 3 July 2015
Hands-on training workshop on vulnerability and adaptation assessments for the Latin American and Caribbean region	TBD	27–31 July 2015
Hands-on training workshop on vulnerability and adaptation assessments for the African region	TBD	28 September to 2 October 2015
15th meeting of the CGE	TBD	5 and 6 October 2015
Team of technical experts training and proficiency assessment	Bonn	First quarter of 2015

Abbreviations: CGE = Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention, BURs = biennial update reports, TBD = to be determined.

VI. Conclusions

60. The CGE has implemented most of the planned activities under its workplan for 2014. It thanked those developed country Parties included in Annex II to the Convention and other developed country Parties that provided financial resources for the implementation of the planned activities. It also thanked those multilateral programmes and organizations as well as non-Annex I Parties that contributed, in the form of technical and/or logistical support, to the successful implementation of the planned activities in 2014.

61. Going forward into 2015, the CGE plans, at its first meeting of 2015, to revisit its work programme and make the necessary adjustments, including incorporating the relevant elements from its long-term strategy referred to in paragraph 36 above. The CGE also conducted a preliminary assessment of the financial resources required to implement its work programme in the next four years (see annex II).

Annex I

Work programme of the Consultative Group of Experts for 2014–2018

Output products	*Activities*	*Implementation timeline*				
		2014	*2015*	*2016*	*2017*	*2018*
Decision 19/CP.19, annex, paragraph 2(a): "Identify and provide technical assistance regarding problems and constraints that have affected the process of and the preparation of national communications and biennial update reports"						
Decision 19/CP.19, annex, paragraph 2(g): "Provide information and technical advice based on, where possible, lessons learned and best practices in the process of and preparation of national communications and biennial update reports by non-Annex I Parties"						
Technical report synthesizing the problems and constraints, lessons learned and best practices	1. Compilation of information on constraints, problems, lessons learned and best practices reported in:					
	1.1. Past CGE and NCSP surveys, complemented with additional CGE questions	✓	✓	✓	✓	✓
	1.2. NCs	✓			✓	
	1.3. BURs		✓	✓	✓	
	1.4. Reports and other publications by the CGE and the NCSP as well as other relevant institutions and agencies such as WRI, UNEP, UNDP, etc.	✓		✓	✓	✓
	2. Synthesis of the compiled information	✓	✓	✓	✓	✓
	3. Provision of technical advice and support with respect to paragraph 2(g)	✓	✓	✓	✓	✓
Decision 19/CP.19, annex, paragraph 2(b): "Provide technical assistance and support to non-Annex I Parties to facilitate the process of and preparation of their national communications and biennial update reports"						
Decision 19/CP.19, annex, paragraph 2(c): "Provide technical advice to non-Annex I Parties to facilitate the development and long-term sustainability of processes of the preparation of national communications and biennial update reports"						

Output products	*Activities*	*Implementation timeline*				
		2014	*2015*	*2016*	*2017*	*2018*
I. BUR training materials in other official United Nations languages	1. Translation of CGE BUR training materials into other United Nations languages	X	X		X	
II. Updated CGE training materials	2. Update of CGE training materials to take into account the latest science and developments under the Convention	X	X	X	X	X
III. E-learning courses	3. Development, operation and maintenance of e-learning course	X	X	X	X	X
IV. A pool of national experts trained on the preparation of BURs and NCs	4. Conduct regional hands-on training workshop on the preparation of biennial update reports					
V. Technical reports on the hands-on training workshops	4.1. Latin America and the Caribbean	X		X		
	4.2. Africa	X		X		
	4.3. Asia and the Pacific	X		X		
	5. Conduct regional hands-on training workshop on vulnerability and adaptation assessment					
	5.1. Latin America and the Caribbean		X			
	5.2. Africa		X			
	5.3. Asia and the Pacific		X			
	6. Conduct regional hands-on training workshop on national greenhouse gas inventories					
	6.1. Latin America and the Caribbean			X		
	6.2. Africa			X		
	6.3. Asia and the Pacific			X		
	7. Conduct regional hands-on training workshop on mitigation assessment					
	7.1. Latin America and the Caribbean				X	
	7.2. Africa				X	
	7.3. Asia and the Pacific				X	

Output products	Activities	Implementation timeline				
		2014	2015	2016	2017	2018
Decision 19/CP.19, annex, paragraph 2(d): "Provide recommendations, as appropriate, on elements to be considered in a future revision of the guidelines for the preparation of national communications and biennial update reports"						
A paper on recommendations on possible elements to be considered in a future revision of the guidelines for the preparation of NCs and BURs	1. Revisit CGE recommendations on elements to be considered in a future revision of the guidelines for the preparation of NCs	x				
	2. CGE recommendations on elements to be considered in a future revision of the guidelines for the preparation of BURs				x	
	3. Analysis of the developments on reporting for non-Annex I Parties since the adoption of decision17/CP.8, as necessary			x		
Decision 19/CP.19, annex, paragraph 2(e): "Provide technical advice and support to Parties, upon request, and information on existing activities and programmes, including bilateral, regional and multilateral sources of financial and technical assistance, to facilitate and support the preparation of national communications and biennial update reports" *Decision 19/CP.19, annex, paragraph 2(f): "Provide technical advice and support to Parties, upon request, on the provision of information on steps to integrate climate change considerations into relevant social, economic and environmental policies and actions"*						
I. Compendium of information on existing activities and programmes to facilitate and support the preparation of NCs and BURs II. Compendium of information on steps to integrate climate change considerations into relevant social, economic and environmental policies and actions	1. Compilation of information on existing activities and programmes to facilitate and support the preparation of NCs and BURs in collaboration with the Global Support Programme/NSCP	x				
	2. Compilation of information on steps to integrate climate change considerations into relevant social, economic and environmental policies and actions in collaboration with the Global Support Programme/NSCP	x				
	3. Update of information on 1 and 2 above in collaboration with the Global Support Programme/NSCP			x		x
	4. Technical advice and support with respect to paragraph 2(e) and (f)	x	x	x	x	x
Decision 19/CP.19, annex, paragraph 2(i): "Develop and organize … appropriate training programmes for nominated technical experts … based on the most updated training materials"						

Output products	*Activities*	*Implementation timeline*				
		2014	*2015*	*2016*	*2017*	*2018*
I. UNFCCC training programme for the team of technical experts II. Pool of experts nominated to the roster of experts trained and certified as the technical experts for conducting the technical analysis of BURs	1. Development of the team of technical experts training programme	X				
	2. Conversion of the team of technical experts training programme into a web-based training programme		X			
	3. Certification workshop/examination for the technical experts	X	X	X	X	X
	4. Revision of the training programme		X			X
Decision 19/CP.19, annex, paragraph 2(h): "Provide guidance and periodic advice to the secretariat to assist it in fulfilling the selection criteria for the composition of the team of technical experts"						
Periodic guidance and advice to the secretariat on the selection of the team of technical experts, as appropriate	Consideration of periodic technical report on the selection of the team of technical experts, as appropriate		X	X	X	X
Other elements of the work programme						
I. Participation in the technical assessment of submissions from Parties on proposed forest reference emission levels and/or forest reference levels	1. Participate in the technical assessment of submissions from Parties on proposed forest reference emission levels and/or forest reference levels	X	X	X	X	X
II. A training module under the team of technical experts training programme covering the technical analysis of data and information used by Parties in the estimation of anthropogenic forest-related emissions by sources and removals by sinks, forest carbon stocks, and forest carbon stock and forest area changes	2. Identify elements for the team of technical experts training programme covering aspects relating to the technical analysis of data and information used and reported in BURs by Parties in the estimation of anthropogenic forest-related emissions by sources and removals by sinks, forest carbon stocks, and forest carbon stock and forest area changes	X				

Output products	*Activities*	*Implementation timeline*				
		2014	*2015*	*2016*	*2017*	*2018*
Representation in the Executive Committee of the Warsaw International Mechanism	1. Participation in the work of the Executive Committee of the Warsaw International Mechanism	x	x	x	x	x
	2. Stocktaking of activities undertaken by the CGE on vulnerability and adaptation	x				
Long-term strategy addressing capacity-building needs of non-Annex I Parties in fulfilling their reporting requirements, including the long-term management plan of the CGE and provision of technical assistance	1. Develop long-term strategy , feedback and revision (including from the SBI)	x				
	2. Implement relevant elements of the long-term strategy		x	x	x	x
	3. Review and revise, as appropriate, the long-term strategy			x		
	4. Explore a potential additional workshop at the subregional/national level, subject to availability of resources	x	x	x	x	x
Updated five-year work programme and annual workplan	Review and revise the five-year work programme, including development of a specific work programme for the year		x	x	x	x
Progress reports on the work of the Consultative Group of Experts, and communication and outreach on its activities	1. Meetings of the Consultative Group of Experts	x	x	x	x	x
	2. Side events of the Consultative Group of Experts	x	x	x	x	x

Abbreviations: CGE = Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention, BURs = biennial update reports, Global Support Programme = Global Support Programme for Preparation of National Communications and Biennial Update Reports by non-Annex I Parties, NCs = national communications, NSCP = National Communications Support Programme, SBI = Subsidiary Body for Implementation, UNDP = United Nations Development Programme, UNEP = United Nations Environment Programme, Warsaw International Mechanism = Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts, WRI = World Resources Institute.

Annex II

Estimated resource requirements to implement the Consultative Group of Experts work programme for 2015–2018

Year	*Estimated resource requirements (USD)*
2015	1 292 000.00
2016	1 579 000.00
2017	1 336 000.00
2018	347 000.00
Total	**4 554 000.00**

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Item 4(b) of the provisional agenda
Reporting from Parties not included in Annex I to the Convention
Work of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention

Progress report on the work of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention: report on the regional training workshops on the preparation of biennial update reports from Parties not included in Annex I to the Convention

Note by the secretariat*

Summary

The Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention, with the assistance of the secretariat, conducted two regional training workshops on the preparation of biennial update reports from Parties not included in Annex I to the Convention (non-Annex I Parties): for the Latin America and the Caribbean region the workshop was held in Panama City, Panama, from 16 to 18 July 2014, and for the Asia-Pacific and Eastern European regions the workshop was held in Yerevan, Armenia, from 8 to 10 September 2014. The aim of the workshops was to enhance the capacity of national experts from non-Annex I Parties in using the "UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention" and raise awareness of the international consultation and analysis process. This report outlines the proceedings of the workshops and includes a summary of the discussions.

* This document was submitted after the due date in order to take into account the outcomes of the 13th meeting of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention, held in Yerevan, Armenia, on 11 and 12 September 2014.

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I. Introduction

A. Mandate

1. The Conference of the Parties (COP), by decision 19/CP.19, decided to continue the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) for a period of five years, from 2014 to 2018.[1] The COP also decided that the CGE, in fulfilling its mandate, shall function in accordance with the revised terms of reference contained in the annex to the same decision.

2. As per the terms of reference contained in the annex to decision 19/CP.19, the CGE developed, at its first meeting of the year held in Bonn, Germany, on 27 and 28 January 2014, a work programme for the period 2014–2018.[2]

3. The CGE, in its work programme for 2014, agreed to conduct three regional training workshops for Parties not included in Annex I to the Convention (non-Annex I Parties) on the preparation of biennial update reports (BURs). However, the regional training workshop for the African region, planned to be held from 18 to 20 August 2014 in Lomé, Togo, was postponed to 23–25 February 2015 owing to the health concerns in the West Africa region.

4. The COP, by decision 19/CP.19, requested the CGE to submit a progress report annually on its work to the Subsidiary Body for Implementation (SBI) for its consideration at the sessions of the SBI held in conjunction with the sessions of the COP.[3]

B. Scope of the note

5. This report, prepared as a part of the progress report on the work of the CGE,[4] contains a summary of the proceedings of and discussions at the following regional training workshops for non-Annex I Parties on the preparation of BURs:

(a) The regional training workshop for the Latin American and Caribbean region on the preparation of BURs, held in Panama City, Panama, from 16 to 18 July 2014;

(b) The regional training workshop for the Asia-Pacific and Eastern European regions on the preparation of BURs, held in Yerevan, Armenia, from 8 to 10 September 2014.

C. Possible action by the Subsidiary Body for Implementation

6. The SBI, having considered this report, may wish to provide further guidance to the CGE, as appropriate, on the provision of technical assistance to non-Annex I Parties to enable them to fulfil their reporting obligations under the Convention.

[1] Decision 19/CP.19, paragraph 1.
[2] FCCC/SBI/2014/17.
[3] Decision 19/CP.19, paragraph 7.
[4] FCCC/SBI/2014/17.

II. Summary of the proceedings

7. In the second half of 2014, the CGE conducted two regional training workshops on the preparation of BURs:

(a) The regional training workshop for the Latin American and Caribbean region on the preparation of BURs was hosted by the Government of Panama in Panama City, Panama, from 16 to 18 July 2014. The workshop was attended by 32 national experts representing 25 non-Annex I Parties from the Latin American and Caribbean region, as well as by six CGE members as the resource persons and one representative from the Global Environment Facility (GEF) secretariat;

(b) The regional training workshop for the Asia-Pacific and Eastern European regions on the preparation of BURs was hosted by the Government of Armenia in Yerevan, Armenia, from 8 to 10 September 2014. The workshop was attended by 39 national experts representing 32 non-Annex I Parties from the Asia-Pacific and Eastern European regions, as well as by 10 CGE members as resource persons and one representative of the United Nations Development Programme.

8. The main objectives of the regional training workshops were, inter alia, to enhance the capacity of national experts in using the "UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention" (hereinafter referred to as UNFCCC reporting guidelines on BURs) to facilitate the preparation of their country's BURs; and to serve as a platform for the exchange of views, lessons learned and experiences relating to the process of and the preparation of national communications and BURs, as appropriate.

9. Both regional training workshops, conducted following similar agendas,[5] were designed to cover all of the core elements of the reporting in BURs through a very interactive approach, including presentations and mock exercises, which were further supplemented by interactive question and answer sessions.

10. A summary of the discussions that took place at the different sessions of the workshops is provided in chapter III below.

III. Summary of the discussions

11. The regional training workshops included seven substantive sessions covering:

(a) An overview of the measurement, reporting and verification framework for developing country Parties under the Convention, including the details of the UNFCCC reporting guidelines on BURs; the process and outcome of international consultation and analysis (ICA); and support for the preparation of BURs;

(b) Reporting of national circumstances and institutional arrangements in BURs, reflecting on previous national communication experiences;

(c) Reporting of national greenhouse gas (GHG) inventories;

(d) Reporting on mitigation actions and their effects;

(e) Reporting on constraints and gaps, and related finance, technology and capacity-building needs and support received.

12. For each of these sessions, the theoretical presentations covering relevant aspects of the UNFCCC reporting guidelines on BURs were followed by interactive discussions made

[5] A workshop agenda template is included in annex II.

more targeted by a set of guiding questions. For the sessions on the reporting on mitigation actions and their effects, constraints and gaps, and related finance, technology and capacity-building needs and support received, the presentations were followed by mock exercises, after which participants engaged in interactive discussions. The mock exercises were designed to provide participants with an indication of what information should be reported in BURs and how, in accordance with the relevant provisions of the UNFCCC reporting guidelines on BURs.

13. The key elements of the discussions under each of the sessions are summarized below. A summary of the discussion under the session on "Support for the preparation of biennial update reports" is not presented separately; instead, it is discussed within the context of the substantive themes covered below.

A. Regional training workshop for the Latin America and the Caribbean region

1. Overview of the measurement, reporting and verification framework for developing countries under the Convention, including the context and the reporting guidelines on biennial update reports, and the process and outcome of international consultation and analysis

14. Some participants noted that certain elements of the UNFCCC reporting guidelines on BURs are vague and therefore leave room for interpretation regarding the elements that need to be reported. The participants acknowledged that the training workshop helped them to gain to a better understanding of the elements that should be reported in BURs.

15. Some participants were concerned about the timing of the submission of the first BUR, which, as per decision 2/CP.17, paragraph 41(a), non-Annex I Parties, consistent with their capabilities and the level of support provided for reporting, are supposed to submit by December 2014. They also expressed concern with regard to the frequency of the submission of subsequent BURs of every two years. To that effect, they highlighted the need to establish or enhance suitable institutional arrangements. Others highlighted the need to explore how reporting under other processes could contribute to BURs.

16. A number of questions were raised seeking clarification on the differences between the "Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention" and the UNFCCC reporting guidelines on BURs. The presentations and subsequent discussions on the different themes covered during the workshop helped to answer most of those questions.

17. The discussions at this session also addressed measurement, reporting and verification of anthropogenic forest-related emissions by sources and removals by sinks, forest carbon stocks, and forest carbon stock and forest area changes resulting from the implementation of the activities referred to in decision 1/CP.16, paragraph 70, taking into account paragraph 71(b) and (c) of that decision.

18. The issue of funding for the preparation of BURs was also frequently raised by participants, in particular regarding the submission cycle of BURs, along with the timing of submission and approval of the project proposal to the GEF for funding of the preparation of BURs. To address this concern, some participants suggested that the project proposal for funding from the GEF cover two BUR submission cycles.

2. Reporting of national circumstances and institutional arrangements in biennial update reports, reflecting on previous national communication experiences

19. The interactive discussions on the reporting of national circumstances and institutional arrangements in BURs, reflecting on experiences from previous national communications, resulted in the following observations:

(a) There is no 'one-size-fits-all' institutional arrangement. While some core elements are prevalent in all institutional arrangements, overall the arrangements depend on the country's national circumstances and respective capabilities;

(b) For the purpose of preparing and submitting BURs in a timely manner, institutional arrangements cannot be classified as either "right" or "wrong"; they are acceptable as long as the information flows smoothly and is in line with the level of quality and detail, and other conditions set by the coordinating national body;

(c) Most countries have some form of institutional arrangements in place for the purpose of preparation of national communications. While some of these arrangements are institutionalized to a certain degree, others still operate on an ad hoc project basis and, hence, Parties with such arrangements are more likely to face challenges in meeting the enhanced reporting requirements under the Convention. Nevertheless, access to sufficient financial resources is one of the key elements in establishing, enhancing and maintaining robust institutional arrangements.

20. Participants recognized the following as some of the key elements that contribute to establishing, enhancing and maintaining robust institutional arrangements:

(a) Establishing formal institutional arrangements to retain skilled personnel and generate information in a timely manner and a suitable format, as well as engaging, over time, stakeholders and decision makers at the highest possible level, as appropriate;

(b) Raising awareness of the decision makers responsible for obtaining the 'buy-in' of other agencies;

(c) Appointing a single official entity, equipped with adequate financial and human resources, to support the implementation of BUR-related activities and act as a nodal agency to mobilize the required input from the various agencies involved in the preparation of BURs;

(d) Using templates to document the concepts and set-up of institutional arrangements to ensure that government officials and other stakeholders are aware of the steps involved and their roles and responsibilities in relation to the preparation of BURs.

3. Reporting of national greenhouse gas inventories

21. The interactive discussions at the session addressing the reporting of national GHG inventories in BURs resulted in the following observations:

(a) Data scarcity, as well as the confidentiality and accessibility of information, especially information from the private sector, might affect the BUR process and, in particular, impact the ability to produce time series data for national GHG inventories;

(b) For those non-Annex I Parties wishing to access the results-based payment system for reducing emissions from deforestation and forest degradation in developing countries, it is important to ensure that the data and information on related activities submitted for the results-based payment are consistent with the national GHG inventories prepared and reported in their BURs;

(c) It is necessary to create a 'buy-in' process to change the perception of partner institutions and foster a sense of ownership, thereby enabling them to become more willing

and active contributors to the country's efforts in relation to the preparation of national GHG inventories every two years;

(d) For some participants, the update of the national GHG inventory every two years may be a challenge, considering that the statistical update of activity data that are relevant for some sectors of the national GHG inventory occurs only every 5 to 10 years;

(e) Some participants alluded to the fact that some non-Annex I Parties are already using the Intergovernmental Panel on Climate Change (IPCC) *2006 IPCC Guidelines for National Greenhouse Gas Inventories* (hereinafter referred to as the 2006 IPCC Guidelines), and questioned how this would be treated during the ICA process.

22. Participants shared some ideas and suggestions that could help non-Annex I Parties to better cope with the need to produce an update of their national GHG inventories every two years, including:

(a) Putting in place formal arrangements to ensure that the process of producing national GHG inventories is internalized nationally, and the knowledge of the people that are trained and have the required skills is maintained over time;

(b) Enhancing stakeholder engagement;

(c) Continuing staff training to implement various IPCC methodologies available (e.g. the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (hereinafter referred to as the Revised 1996 IPCC Guidelines); the *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*; and the *Good Practice Guidance for Land Use, Land-Use Change and Forestry*);

(d) Creating a data gathering, processing and analysing tool, containing tables and forms with simple walk-through instructions, as appropriate, for use by the data providers to facilitate the provision of 'right' data in a suitable format and timely manner.

4. Reporting on mitigation actions and their effects

23. The interactive discussions on the session addressing the reporting on mitigation actions and their effects resulted in the following observations:

(a) The lack of clarity and detailed requirements in the UNFCCC reporting guidelines on BURs were identified as key challenges to identifying and reporting information on mitigation actions and their effects. Further, the reporting templates designed by the CGE as a part of its training materials on the preparation of BURs were noted as being too detailed;

(b) Many of the mitigation actions and plans might only produce effects within a time frame that extends beyond the two-year BUR submission cycle. Hence, if the level of detail to be reported on mitigation actions is too high, there is a possibility that the BURs will become repetitive over time;

(c) Tracking progress made in the implementation of a mitigation action vis-à-vis the financial investment and GHG emissions by sources and removals by sinks was identified as a main challenge, underlined by the fact that the country teams responsible for formulating and implementing mitigation actions and for overseeing and tracking financial investments, as well as for preparing and coordinating the GHG inventory, do not necessarily interact on a regular basis. Another dimension associated with this challenge was linked to the lack of data on indicators that would allow a meaningful assessment of the progress made;

(d) Some participants highlighted the technical complexity of developing scenarios for GHG emission projections and mitigation assessment as another major

challenge, mainly related to a lack of available expertise and necessary data and information.

24. Participants shared some ideas and suggestions that could help non-Annex I Parties to better cope with the need to report on mitigation actions and their effects in the BURs every two years, including:

(a) In order to limit the human effort and the financial and administrative costs involved in the reporting of detailed information on mitigation actions and their effects, participants suggested the grouping of activities, as an initial step, to facilitate reporting at a higher level, either nationally or by sector, on policies, programmes and plans;

(b) Raising awareness on climate change mitigation and reporting requirements under the Convention among relevant stakeholders at all levels, including the private sector, to enhance the communication and exchange of information, and develop a more complete view of the mitigation actions under way in the country in the given period of time;

(c) Mainstreaming the knowledge among the national institutions to enhance the training of people involved in the formulation, implementation and monitoring of mitigation actions, for example by designing and deploying a 'training of trainers' programme in each ministry or institution involved;

(d) Further enhancing an understanding of the social and economic consequences of response measures;

(e) Using a tabular format, which was regarded as a practical approach to reporting on mitigation actions and their effects. To that effect, some participants suggested that it would be useful to include further instructions or examples in the training materials.

5. Reporting on constraints and gaps, and related finance, technology and capacity-building needs and support received

25. The interactive discussions on the session addressing the reporting on constraints and gaps, and related finance, technology and capacity-building needs and support received resulted in the following observations:

(a) The results of the mock exercise demonstrated that most participants have a different understanding of the level and type of information that needs to be reported as per the UNFCCC reporting guidelines on BURs. Participants felt that the reporting on elements addressed under this session on a continuous basis implies a learning process that might take a minimum of two to three BUR reporting cycles to sufficiently mature;

(b) The absence of a legal framework for data sharing and the resultant restrictions on data access, as well as the absence of, or a weakness in, systems and procedures for collecting and organizing the information necessary for reporting in the BURs constitute major barriers and challenges that may hinder the preparation and submission of BURs in a timely manner;

(c) The cycle and timing related to funds from the GEF have been raised as an issue: given the fact that BURs need to be completed every two years, the necessary funding for the next BUR needs to be in place as soon as the current BUR is completed;

(d) Only one participant was able to identify a national agency that maintains a record of information on financial and technical support received. Therefore, reporting on such support will be challenging for other Parties;

(e) Participants also noted that the GEF funding for BURs should be increased to support the establishment and/or enhancement of adequate institutional arrangements and staffing, as well as the databases required to manage the information to be reported.

26. Participants shared some ideas and suggestions that could help non-Annex I Parties to report information on constraints and gaps, and related finance, technology and capacity-building needs and support received in their BURs every two years, including:

(a) Establishing an online system to collect information on support needed and received by various organizations;

(b) Enhancing interaction between the nodal agency responsible for collecting and coordinating inputs from relevant stakeholders and the data providers to ensure that there is no double counting of the information to be reported and that the sources are comprehensively covered, to the extent possible.

B. Regional training workshop for the Asia-Pacific and Eastern European regions

1. Overview of the measurement, reporting and verification framework for developing countries under the Convention

27. During the discussions, the participants sought clarification on the period of time in which the information on finance, technology and capacity-building support needed and received is to be reported, in view of the fact that this time frame is normally between 5 and 10 years. The participants were informed that since the UNFCCC reporting guidelines on BURs do not specify such a time frame, the decision on it is left to the individual countries to ensure that what is reflected in their BUR is funding that facilitates climate change reporting, that it is relevant to current and future situations, and that it takes double counting into consideration. Similar issues were raised with regard to mitigation scenarios, which are also long-term actions.

28. The participants raised concerns with regard to mitigation actions for developing countries which influence domestic budgets as, consequently, it is difficult for countries to commit to and take on such obligations. It is therefore unclear how this mitigation gap will be filled.

29. The participants also sought clarification as to how, during the technical analysis of BURs, the technical team of experts will treat BURs undergoing the technical analysis under the ICA process that contain information on national GHG inventories prepared using the 2006 IPCC Guidelines as opposed to the Revised 1996 IPCC Guidelines. It was clarified that the UNFCCC reporting guidelines on BURs refer only to the Revised 1996 IPCC Guidelines.

2. Reporting of national circumstances and institutional arrangements in biennial update reports, reflecting on previous national communication experiences

30. The interactive discussions on the reporting of national circumstances and institutional arrangements in BURs, reflecting on experiences from previous national communications, resulted in the following observations:

(a) Most participants expressed the view that maintaining sustainable institutional arrangements that function effectively on a continuous basis is a key challenge owing to limitations in national resources and capacities available. Nevertheless, they were optimistic that the existing institutional arrangements have enough capacity to cope with the new challenge of preparing and submitting a BUR every two years;

(b) It was noted that the functions of the institutions involved in the process of and the preparation of BURs vary from country to country; however, the effectiveness of their functioning largely depends on the political will and support, as well as the

engagement and cooperation of the stakeholders. In this respect, better awareness and coordination among politicians, policymakers, decision makers and experts, together with enhanced financial and technical support, are viewed as elements that can contribute to the further strengthening of institutional arrangements;

(c) Insufficient financial resources, a lack of expertise and training, and political instability and support were highlighted as some of the key aspects that adversely impact the effective functioning of institutional arrangements;

(d) The need to have additional technical guidance on some of the methodological themes, such as quality assurance/quality control procedures, has also been raised;

(e) Some participants were of the view that that the obligation to submit BURs every two years can contribute to improving the institutional arrangements in the countries. At the same time, it can put an additional burden on both human and financial resources.

31. The participants identified some essential elements for setting up and maintaining institutional arrangements, such as:

(a) Existing institutional arrangements that are mostly project-based need to be institutionalized in a permanent system in order to respond effectively to the needs arising from the additional biennial reporting requirements related to the preparation of BURs and to cope with the ICA process. An organized, permanent arrangement would address issues relating to stakeholder engagement and the human resources needed to deal with such additional reporting requirements;

(b) The reporting process should be linked to the national development strategy, thus ensuring that it is mainstreamed and built on existing national processes;

(c) There is an additional need to include higher-level representation in the national reporting process, including further strengthening the arrangements for better coordination among politicians, policymakers and decision makers. If sufficient political support is provided, this should be further cemented by appropriate legislation and/or a legal framework, if necessary;

(d) The national coordinating entity should establish a dialogue platform to deal with gaps in cooperation between the coordinating entity, collaborating stakeholders and experts, which includes the provision of additional financial and technical support aimed at awareness-raising to ensure that all actors involved are fully aware of the BUR process and that their interest is increased;

(e) To support and sustain institutional arrangements, Parties should put in place continuous national funding and/or financial commitments and should take advantage of the GEF funding window to ensure that there is no time gap between the BUR reporting cycles and the funding;

(f) Continuous training of the experts involved in the process of and the preparation of national reports should take place, particularly to enhance the acquired knowledge of new experts, as this can address any setbacks created by internal or external staff movements;

(g) To effectively prepare for participation in the ICA process, in the future, provision of support during the ICA process could be included in the terms of reference of consultants and experts engaged to assist the country in the preparation of their national reports;

(h) The training should target those national experts involved in the internal review of BURs as a part of the quality assurance/quality control procedures, and should

also explore opportunities for providing incentives, including monetary payment, for the time spent on such reviews;

(i) Parties included in Annex to the Convention have elaborate and mature national systems for preparing national communications and national GHG inventories, which, among other things, include a legal and/or official framework for information collection and sharing. Non-Annex I Parties could benefit from an overview of such existing legal and/or official frameworks.

3. Reporting of national greenhouse gas inventories

32. The interactive discussions on the session addressing the reporting of national GHG inventories in BURs resulted in the following observations:

(a) Some participants noted that their existing institutional arrangements can adequately cope with the preparation of national GHG inventories, and the updating thereof every year. On the other hand, other participants highlighted the challenges related to financial and technical capacity, and were of the view that their existing institutional arrangements may not be able to adequately cope with the continuous demand for additional data owing to limited human, financial and technical resources. They also emphasized that insufficient data availability can affect the quality of the reporting and the timely submission of BURs;

(b) As per the scope of BURs, non-Annex I Parties are required to submit a national inventory report as a part of the information on national GHG inventories. However, many participants were unsure about the format and content of the national inventory report because the UNFCCC reporting guidelines on BURs do not include such specific information;

(c) Countries continue to experience challenges in sustaining their national teams, and have limited technical capacity. This issue can be addressed via knowledge transfer between trained local experts and young professionals involved in the preparation of national GHG inventories;

(d) When updating the national GHG inventories every two years, it is important to take advantage of, and build on, other relevant past or ongoing initiatives and activities, such as the technology needs assessment, that sometimes require a review of the latest GHG emission estimates;

(e) Data availability and data archiving are still a challenge, which can be resolved by using the methods provided in the 2006 IPCC Guidelines;

(f) The challenges with regard to data archiving continue and persist, indicating the need for further improvement. The GHG inventory software is still viewed as complex for new professionals, who thus require continuous training.

33. Participants shared some ideas and suggestions that could help non-Annex I Parties to better cope with the need to produce an update of their national GHG inventories every two years, including:

(a) The continued challenge of internal coordination within teams and between ministries can be addressed by the formalization of institutional arrangements, including legal enforcement, such as through a memorandum of understanding between ministries or a national law, that will facilitate activities such as data collection and processing, and by the establishment of interministerial teams;

(b) Funding from the GEF and the national budget should be continuous to improve the quality of the national GHG inventory and to ensure the sustainability of the national inventory team;

(c) Capacity-building on a regional and national level should be continuous to enable the capacities of national experts to be developed continuously. The CGE, with the assistance of the secretariat, could identify Parties that require additional in-country capacity-building and training. The in-country training workshops could be designed for an extended period of two to three weeks;

(d) South–South and North–South cooperation should be encouraged, in particular in the sharing of activity data, emission factors and best practices;

(e) To enhance the sustainability of the national inventory team and institutional arrangements, it is important to have a continuous process of preparation of national GHG inventories. To that end, it would be advisable for those countries that are able to do so to prepare a GHG inventory annually, as opposed to biennially;

(f) Access to a template for the national inventory report would assist countries in the reporting process.

4. Reporting on mitigation actions and their effects

34. The interactive discussions on the session addressing the reporting on mitigation actions and their effects resulted in the following observations:

(a) Participants highlighted a number of challenges that they currently face or are likely to face in reporting information on mitigation actions and their effects. These include: (1) the level of detail required in the reporting; (2) the lack of a clear definition of some of the key reporting elements, such as mitigation actions, assumptions and methodologies; (3) the difficulty in quantifying some of the mitigation actions; (4) the lack of adequate institutional arrangements, especially for data collection and sharing among various stakeholders or agencies, and for monitoring and reporting the progress of implementation; and (5) defining the time frame in which the mitigation actions are to be reported;

(b) Some participants noted that reporting the information in a tabular format, which is more appropriate for the reporting of information that is quantitative in nature, restricts the information to the essential elements only; not all non-Annex I Parties will be in a position to quantify the information to be reported and, hence, may include qualitative information;

(c) In identifying and reporting indicators that define the progress of the implementation of mitigation actions, caution must be exercised to ensure that there is no confusion between "progress indicators" and "impact indicators". This is an important consideration since the level of understanding of the mitigation action(s) will be influenced by the metrics/indicators used. It was also recognized that not every indicator will show progress biennially and some may take more than two years for progress to be explicitly quantifiable or noticeable. Some indicators are easier to use than others, owing to the amount of information available in the national statistics. For those that are not as straightforward, additional efforts may be required, for example additional data collection.

35. Participants shared some ideas and suggestions that could help non-Annex I Parties to better cope with the need to report on mitigation actions and their effects in BURs every two years, including:

(a) Sharing lessons learned and exchanging information and results as sources of reference material. To that effect, the participants engaged in extensive discussions, sharing their experiences, lessons learned and the results achieved;

(b) Setting a clear definition of domestic measurement, reporting and verification in the country, which will prioritize mitigation actions to enable the most efficient resource allocation;

(c) Political buy-in, including the involvement of high-ranking political offices such as the Prime Minister;

(d) Data collection and data sharing among various stakeholders or agencies and regular joint meetings;

(e) The provision of financial resources to the relevant institutions;

(f) Cooperation with the national GHG inventory team and with the subnational authorities involved in the implementation and monitoring of the mitigation actions;

(g) The decentralization of information through a single coordinating body, which is responsible for the preparation of BURs, to aggregate and integrate information.

5. Reporting on constraints and gaps, and related finance, technology and capacity-building needs and support received

36. The interactive discussions on the session addressing the reporting on constraints and gaps, and related finance, technology and capacity-building needs and support received resulted in the following observations:

(a) In general, the participants seemed to have a clear understanding of and be comfortable with the reporting requirements for issues addressed at this session. However, there was still some confusion relating to the classification of the status of activities, and the balance between quantitative and qualitative information;

(b) There was also a general recognition among participants that it will be a significant challenge to comprehensively cover all of the information on the support needed and received in a country, taking into account the diversity of actors involved in formulating and mobilizing the support needed, and in implementing the support received. The challenge is sometimes further compounded by differences in the interpretation of the support received for activities that have climate change related benefits as a by-product of a development activity;

(c) Participants highlighted data availability, lack of transparency and accessibility to financial data, technical assistance and capacity-building support, and lack of coordination and a platform for consolidated national reporting as some of the key challenges or barriers in compiling and reporting information on constraints and gaps, and related finance, technology and capacity-building needs and support received;

(d) Some participants reported that they have put in place a national committee for the reporting process, which enables them to access data from other sectors;

(e) The monetization of various types of support needed and received, such as in-kind contributions, is challenging for countries as it is not a straightforward exercise to put separate values on financial, capacity-building and technical support and technology transfer, which at times overlap significantly.

37. Participants shared some ideas and suggestions that could help non-Annex I Parties to better cope with the reporting on constraints and gaps, and related finance, technology and capacity-building needs and support received in their BURs every two years, as follows:

(a) There is a need for coordination and a platform for clear reporting of the support needed and received for the climate change sector within the various ministries involved. The Ministry of Finance is, in general, identified as an example of an institution

that can act as a nodal agency that should be mandated to coordinate input from various national institutions and stakeholders;

(b) It is important to establish detailed and clear activities or categories of support needed and received. In addition, documenting, in the form of footnotes, the choices of activities or categories and the reporting thereof in the BUR is an equally important aspect as it will facilitate a better understanding and transparency of the information reported;

(c) Acquiring data from the sectoral institutions and other stakeholders involved requires time and planning and, hence, it is important that they are informed of the reporting requirements related to their corresponding contributions in advance to facilitate efficient resource planning on their part. To that effect, participants were of the view that the planning process needs to be established at the national and subnational levels;

(d) Collecting information from donors on the support provided, in particular of financial and technical nature, was seen as another means of reinforcing the information collection efforts at the national level.

IV. Conclusions

38. The participants were very active and engaged in the discussions and break-out group sessions throughout the workshops. This was the result of a good balance in the design of the workshop between presentations, interactive question and answer sessions and mock exercises. The guiding questions, which were prepared and distributed well in advance of the workshop, appear to have brought good results: participants were well prepared for the interactive discussions and mock exercises.

39. Overall, the CGE believes that the workshops were successful and that they managed to achieve the following:

(a) Enhancing familiarity with the information that needs to be reported in BURs (i.e. reporting requirements);

(b) Confirming the institutional arrangements that need to be put in place in order to generate the information to be reported (i.e. methods and tools) and the possible challenges that Parties may face in doing so;

(c) Enhancing the understanding of how information should be reported in accordance with the UNFCCC reporting guidelines on BURs and the possible challenges that Parties may face in doing so, as well as of how the information in BURs is utilized (i.e. the ICA process, including the technical analysis);

(d) Explaining the possible gaps in the institutional, technical and financial capacity and in data and information, and identifying possible solutions or considerations to address them;

(e) Providing an opportunity for the exchange of views and networking among regional experts.

40. This view was further reinforced by the participants through the workshop evaluation survey, who acknowledged, overwhelmingly, that the workshops had helped to enhance their knowledge and expertise relevant and necessary for the preparation of their first BUR. They were also satisfied with the design and content of the training workshops.

41. The CGE nevertheless noted some opportunities for further improvement in the design and delivery of such training workshops in the future, which could include the following:

(a) Continuing to provide training materials to workshop participants in advance of the workshops while presenting an abridged version of the presentations during the workshops. Recognizing that experiences, knowledge and familiarity with the background materials may vary among the participants, the content of the presentations and exercises should be designed in a balanced manner, to suit all participants;

(b) Improving in-session hands-on exercises by:

(i) Improving and simplifying the reporting tables contained within the supplementary CGE training materials on BURs;[6]

(ii) Supplementing the mock exercises with fictitious case studies to enable experts to engage in more realistic and comprehensive hands-on exercises;

(iii) Requesting experts to bring national examples which can be used as case studies during the training sessions;

(c) Taking into account the following aspects when organizing the break-out groups, with a view to maximizing the instructive nature of and engagement in the break-out group sessions of the various exercises:

(i) Language: grouping together, to the extent possible, participants and CGE moderators speaking the same language;

(ii) Technical background, level of experience and involvement in the national communication and/or BUR process; for example, putting coordinators in one group and mitigation specialists in another;

(iii) Regional and national circumstances: grouping together countries from the same region and/or those with similar national circumstances;

(d) Encouraging the secretariat, in line with its resources, to explore ways to:

(i) Extend the duration of future BUR workshops, as three days are not sufficient to comprehensively cover all the themes of the BUR;

(ii) Invite additional experts from Parties to attend the workshop.

42. The CGE thanked those developed country Parties included in Annex II to the Convention and other developed country Parties that provided financial resources for the workshop. It also thanked the Government of Panama and the Government of Armenia for hosting the regional training workshops for non-Annex I Parties from the Latin American and Caribbean region, and from the Asia-Pacific and Eastern European regions, respectively.

[6] The reporting tables contained within the supplementary CGE training materials on BURs are meant to serve as one of the suggested tabular formats. Non-Annex I Parties may choose to design other tables that meet the requirements of the reporting guidelines on BURs.

Annex I

[English only]

Agenda for the regional training workshops on the preparation of biennial update reports from non-Annex I Parties

Day 1: 8 September 2014

8–9 a.m.	Registration
9–9.45 a.m.	**Session 1: Opening and overview of the workshop** • Opening remarks – *Chair of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE)* • Welcome – *secretariat* • Keynote address – *host country* • Self-introduction by participants • Workshop objectives and agenda – *secretariat*
10–10.30 a.m.	Coffee break
10.30–11.30 a.m.	**Session 2: Overview of the measurement, reporting and verification framework for developing countries under the Convention** • Biennial update report (BUR) context and guidelines – *secretariat* • International consultation and analysis (ICA): process and outcome – *secretariat* • Question and answer session
11.30 a.m.–12.30 p.m.	**Session 3: Support for the preparation of biennial update reports** • Results of the survey on problems and constraints, lessons learned and best practices – *secretariat* • Technical support for the preparation of BURs – *CGE Chair* • Supporting countries on the ground – *United Nations Development Programme/United Nations Environment Programme* • Question and answer session
12.30–2 p.m.	Lunch break
2–3.30 p.m.	**Session 4: Reporting of national circumstances and institutional arrangements in biennial update reports, reflecting on previous national communication experiences** • Presentation of factual elements for reporting national circumstances and institutional arrangements in BURs – *secretariat* • Reflecting on experiences from national communications: building sustainable institutional arrangements – possible tools, best practices and lessons learned, and approaches for reporting national circumstances and institutional arrangements in BURs – *CGE*

Day 1: 8 September 2014

	• Question and answer session
3.30–4 p.m.	Coffee break
4–5.30 p.m.	**Session 4: Reporting of national circumstances and institutional arrangements in biennial update reports, reflecting on previous national communication experiences** (continued)
	• Interactive break-out group discussion: (three groups: one CGE member as a moderator per break-out group with country representatives as participants) – *CGE* (a) What are some of the essential elements necessary for setting up and maintaining institutional arrangements that respond sufficiently to the needs arising from the preparation of BURs and from the ICA process? (b) What are some of the key factors and features of the national circumstances that facilitate the efficient functioning of institutional arrangements in the country; for example, political support, awareness among senior policymakers and decision makers, and support from external entities? (c) What are the key challenges in setting up and maintaining sustainable institutional arrangements that function on a continuous basis? (d) Are the current national institutional arrangements in place to deal with the preparation of national communications adequate to cope with the challenge of producing a BUR every two years? (e) Is there a clear understanding among the institutions involved of their role in the national institutional arrangements for the preparation of BURs in response to the requirements of the ICA process? For example, who will be responsible for providing feedback during the three-month period that the Party will have to review and comment on the draft summary report prepared by the team of technical experts? Who will be responsible for providing answers to the Party's questions during the facilitative sharing of views? Who will be responsible for dealing with the comments and questions received during the ICA process in the preparation of the subsequent BUR?
	• The moderator of each break-out group will provide a summary of the discussions of the break-out group to the plenary (five minutes for each moderator)
	• Interactive discussion

Day 2: 9 September 2014

9–10.30 a.m.	**Session 5: Reporting on mitigation actions and their effects**
	• Key provisions in the "UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention" (UNFCCC reporting guidelines on BURs) and approaches for reporting mitigation actions and their effects in the BUR – *CGE*
	• Reporting the methodologies and assumptions, objectives, steps taken or envisaged, progress of implementation and results achieved in the BUR: approaches and examples – *CGE*

Day 2: 9 September 2014

	• Question and answer session
10.30–11 a.m.	Coffee break
11 a.m.–12.30 p.m.	**Session 5: Reporting on mitigation actions and their effects** (continued)
	• Mock exercise (details of the mock exercise are contained in annex A to the agenda[1])
12.30–2 p.m.	Lunch break
2–3.30 p.m.	**Session 5: Reporting on mitigation actions and their effects** (continued)
	• Interactive break-out group discussion based on the mock exercise conducted in the previous part of the session: (three groups: one CGE member as a moderator per break-out group with country representatives as participants) – *CGE* (a) Are there any challenges in identifying and reporting information on mitigation actions and their effects using the UNFCCC reporting guidelines on BURs? If so, what are they and how can they be addressed? (b) What are some of the challenges experienced in assessing the progress of implementation of mitigation actions and their effects? How have these challenges been addressed? (c) What preparations have been made or will be needed at the national level to enhance existing, or set up new, institutional arrangements to facilitate domestic measurement, reporting and verification as well as the reporting of information on mitigation actions every two years? (d) Are the institutions involved in the monitoring of the mitigation actions the same as those involved in the greenhouse gas (GHG) inventory preparation process?
	• The moderator of each break-out group will provide a summary of the discussions of the break-out group to the plenary (five minutes for each moderator)
	• Interactive discussion
3.30–4 p.m.	Coffee break
4–5.30 p.m.	**Session 6: Reporting of national greenhouse gas inventories**
	• Key provisions in the UNFCCC reporting guidelines on BURs on the reporting of information on national GHG inventories in the BUR – *CGE*
	• Question and answer session
	• Overview of the tables and methods presented in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*, referred to in decision 2/CP.17, annex III, the tools available for estimating emissions in national GHG inventories, the key considerations in applying potential updates to activity data, and the minimum requirements with regard to inventory years, frequency and submission dates – *CGE*
	• Question and answer session

[1] Not reproduced in this document.

Day 3: 10 September 2014

9–10.30 a.m.	**Session 6: Reporting of national greenhouse gas inventories** (continued)
	• Dealing with the reporting of elements that are encouraged: GHG inventory preparation and management, compilation, documentation and archiving, and final inventory approval processes/procedures – *CGE*
	• Question and answer session
10.30–11 a.m.	Coffee break
11 a.m.–12.30 p.m.	**Session 6: Reporting of national greenhouse gas inventories** (continued)
	• Interactive break-out group discussion: (one CGE member as a moderator for each of the three break-out groups with country representatives as participants) – *CGE*
	(a) As per the UNFCCC reporting guidelines on BURs, the scope of the BUR includes the provision of an update on the national GHG inventory, including a national inventory report. Are there current national institutional arrangements in place to deal with the preparation of the national GHG inventory, and can they adequately cope with the challenge of producing updates every two years?
	(b) What are some of the key considerations that Parties need to take into account when preparing national GHG inventories and updating the data every two years?
	(c) What are the specific challenges your Party may face in fulfilling the following requirements contained in decision 2/CP.17 and the UNFCCC reporting guidelines on BURs:
	– The first BUR submitted by non-Annex I Parties shall cover, at a minimum, the inventory for the calendar year no more than four years prior to the date of the submission, or more recent years if information is available, and subsequent BURs shall cover a calendar year that does not precede the submission date by more than four years;
	– Any change to the emission factors may be made in the subsequent full national communication;
	– Each non-Annex I Party is encouraged to provide a consistent time series covering the years reported in the previous national communication;
	– Are there any additional challenges in developing and reporting national GHG inventories using the UNFCCC reporting guidelines on BURs? If so, what are they and how can they be addressed?
	• The moderator of each break-out group will provide a summary of the discussions of the break-out group to the plenary (five minutes for each moderator)
	• Interactive discussion
12.30–2 p.m.	Lunch break
2–3.30 p.m.	**Session 7: Reporting on constraints and gaps, and related finance, technology and capacity-building needs and support received**
	• Key provisions in the UNFCCC reporting guidelines on BURs and approaches for reporting constraints and gaps, and related finance, technology and capacity-building needs and support received – *CGE*

	• Question and answer session
	• Mock exercise (details of the mock exercise are contained in annex A to the agenda)
3.30–4 p.m.	Coffee break
4–5.30 p.m.	**Session 7: Reporting on constraints and gaps, and related finance, technology and capacity-building needs and support received** (continued)
	• Interactive break-out group discussion based on the mock exercise conducted in the previous part of the session: (one CGE member as a moderator for each of the three break-out groups with country representatives as participants) – *CGE* (a) What are the key barriers/challenges/bottlenecks that may hinder the preparation and timely submission of BURs? (b) What are the key barriers/challenges/bottlenecks in compiling and reporting information on constraints and gaps, and related finance, technology and capacity-building needs and support received? (c) What are some of the possible approaches that could be used to identify and report, in a robust manner, constraints and gaps, and related financial, technical and capacity-building needs, as well as development and transfer of technology needs? (d) What are some of the key considerations that Parties need to take into account when compiling and reporting every two years information on financial, technical, capacity-building, development and transfer of technology support received for climate change activities as well as for the preparation of the BUR?
	• The moderator of each break-out group will provide a summary of the discussions of the break-out group to the plenary (five minutes for each moderator)
	• Interactive discussion
5.30–5.50 p.m.	**Feedback and evaluation**
5.50–6 p.m.	**Session 8: Concluding session**

Annex II

[English only]

Design, structure and content of the interactive mock exercises

I. Note to the participants

1. All the participants are urged to bring to the workshop copies of their country's latest national communication submitted under the Convention and any other relevant background material that was used in the preparation of that document, either in print or in digital format. This information will serve as a valuable input to be consulted during the mock exercises detailed below.

2. It is also strongly recommended, as a preparatory activity, that participants read and are thoroughly familiar with their latest national communication submitted under the Convention prior to attending the workshop. This will also serve as important background for the interactive discussions.

II. Mock exercise on session 6: reporting on mitigation actions and their effects

3. Each participant will be provided with three suggested tabular formats to cover the information on mitigation actions and their effects, to the extent possible, including:

(a) The name and description of the mitigation action, including information on the nature of the action, the coverage (i.e. sectors and gases), the quantitative goals and the progress indicators;

(b) Information on methodologies and assumptions;

(c) The objectives of the action and steps taken or envisaged to achieve that action;

(d) Information on the progress of implementation of the mitigation actions, the underlying steps taken or envisaged, and the results achieved, such as the estimated outcomes (metrics depending on type of action) and estimated emission reductions, to the extent possible;

(e) Information on international market mechanisms;

(f) One of the objectives of the "UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention", contained in decision 2/CP.17, annex III, is to facilitate reporting, to the extent possible, on any economic and social consequences of response measures.

4. Each participant will be instructed to choose one mitigation action (previously communicated by the Party concerned or created by the participant). Based on the chosen mitigation action, the participant will be asked to individually fill in, to the extent possible, the three tables provided below with the information listed in paragraph 3(a–f) above. Thirty minutes will be allotted for this individual exercise. Members of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) and the secretariat will be available as resource persons to facilitate and assist the participants in undertaking the exercise.

Figure 1
Suggested tabular format 6.1: description of mitigation actions

Name: state the name of the action here				
Description: provide a description of the action here and further details in the columns below				
Nature of the action	**Coverage**		**Quantitative goals**	**Progress indicators**
	Sectors	Gases		
Example	i.	i.	i.	i.
	ii.	ii.	ii.	ii.

Figure 2
Suggested tabular format 6.2: details of mitigation actions

Name: state the name of the action here	
Information	
Methodologies	Assumptions
i.	1.a
ii.	2.a
	3.b

Objectives and progress of implementation				
Objectives of the action	**Steps taken or envisaged to achieve the action**		**Results achieved such as estimated outcomes (metrics depending on the type of action)**	**Estimated emission reductions, to the extent possible**
	Steps taken	Steps envisaged		
i.	i.	i.	i.	i.

	ii.	ii.	ii.	ii.
Information on international market mechanisms				
Information on international mechanisms relevant to the implementation of the action				

Figure 3
Suggested tabular format 6.3: reporting information on any economic and social consequences of response measures

Response measures action	**Social and economic consequences from the response measures action**	**Challenges and barriers to address the consequences**	**Support needed to address the consequences**
1. In this column, non-Annex I Parties could provide a description of specific action(s) of response measures	*2. In this column, Parties could report on the consequences of the specific action identified in column 1, including any information on how the consequence has been linked to the action* *The information should be disaggregated in terms of intensity and magnitude as: low; medium or moderate; and high (to create specific criteria for disaggregation)*	*3. In this column, Parties could report on challenges and barriers in addressing coping with the consequences identified in column 2.* *Parties may also provide further information under the section on reporting finance, technology and capacity-building needs and support received*	*4. In this column, Parties could report on the support needed for economic diversification.* *Parties may also provide further information under the section on reporting finance, technology and capacity-building needs and support received*

5. At the end of the exercise, the tables will be collected by the moderators and three break-out groups will be formed at which the tables will be presented by the participants (two to three minutes each). After the presentations, the break-out groups will be encouraged to identify the areas where no information was available and/or the reporting of such information was not considered to be possible by the participants, as well as the challenges involved in filling in the tables.

6. The moderators of the break-out groups will summarize the presentations and subsequent discussions and make a presentation to the plenary as the initial inputs for the continuation of the session.

II. Mock exercise for session 7: reporting on constraints and gaps, and related finance, technology and capacity-building needs and support received

7. Each participant will be provided with three suggested tabular formats to cover the information on constraints and gaps, and related finance, technology and capacity-building needs and support received, as follows:

(a) Constraints and gaps, and related financial, technical and capacity-building needs;

(b) Financial resources, technology transfer, capacity-building and technical support received from the Global Environment Facility, Parties included in Annex II to the Convention and other developed country Parties, the Green Climate Fund and multilateral institutions for activities relating to climate change, including for the preparation of the current BUR;

(c) Technology needs, which must be nationally determined, and technology support received.

(d) Based on the information reported in the latest national communications submitted under the Convention and/or any other relevant background documents, each participant will be asked to individually fill in the tables with the information requested in items (a–c) above. Thirty minutes will be allotted for this individual exercise. CGE members and representatives of the secretariat will be available to facilitate the exercise and assist the participants.

Figure 4
Suggested tabular format 7.1: reporting information on financial, technical and capacity-building needs and support

	Status (ongoing/ planned/completed)	**Overall support needed**	**Support received**	**Additional support needed**
Activity 1				
Activity 2				
Activity 3				
Activity 4				

Figure 5
Suggested tabular format 7.2: reporting information on nationally determined technology needs and technology support received

	Reporting period:			
	Status (ongoing/planned/ completed)	**Overall support needed**	**Support received**	**Additional support needed**
Activity 1				
Activity 2				
Activity 3				
Activity 4				

Figure 6

Suggested tabular format 7.3: reporting information on support received: technical, financial, capacity-building and transfer of technology

Reporting period:						
Type		Description of support, including USD amount (exchange rate)				
		Multilateral sources	Funding from Annex II and other developed country Parties	Party contribution	Multilateral financial institutions, including regional development banks	Other sources
Preparation of biennial update report	*Financial*					
	Capacity-building					
	Technical					
	Technology transfer					
Climate change activities contained in the biennial	*Financial*					
	Capacity-building					

update report	*Technical*					
	Technology transfer					

8. At the end of the exercise, the tables will be collected by the moderators and three break-out groups will be formed at which the tables will be presented by the participants (two to three minutes each). After the presentations, the break-out groups will be encouraged to identify the areas where no information was available and/or the reporting of such information was not considered to be possible by the participants, as well as the challenges involved in filling in the tables.

9. The moderators of the breakout groups will summarize the presentations and subsequent discussions and make a presentation to the plenary as the initial inputs for the continuation of the session.

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Item 4(b) of the provisional agenda
Reporting from Parties not included in Annex I to the Convention
Work of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention

Progress report on the work of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention: report on the workshop on the peer review of the materials for the training of the team of technical experts

Summary

The workshop on the peer review of the materials for training the team of technical experts was organized by the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE), with the assistance of the secretariat. It was held in Bonn, Germany, on 26 and 27 October 2014. The goal of the workshop was to seek feedback on the draft training materials developed by the CGE, including their design and technical content, with a view to ensuring that they correspond to the requirements of the technical analysis of the biennial update reports. This report summarizes the proceedings of the workshop, including the technical sessions and discussions.

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I. Introduction

A. Background

1. The Conference of Parties (COP), at its nineteenth session, adopted the composition, modalities and procedures of the team of technical experts (TTE) for undertaking the technical analysis of biennial update reports (BURs) from Parties not included in Annex I to the Convention (non-Annex I Parties).[1]

2. Upon continuation of the term and mandate of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE), for a period of five years, from 2014 to 2018,[2] COP 19 requested the CGE to develop and organize appropriate training programmes for nominated technical experts (hereinafter referred to as the training programme), taking into account annexes III and IV to decision 2/CP.17, based on the most up-to-date training materials of the CGE, with a view to improving the technical analysis, taking into account the difficulties encountered by non-Annex I Parties in the preparation of their BURs.[3]

3. The COP also decided that once the training programme is established, only those nominated experts who have successfully completed the training programme shall be eligible to serve on the TTE.[4]

4. In response to that request, the CGE, when defining its work programme for 2014[5] at its first meeting of the year, held in Bonn, Germany, on 20 and 21 January 2014, agreed to focus on designing and developing the training programme. The training materials for this programme aim to respond to the needs of the technical analysis, in particular by enhancing the proficiency of nominated technical experts through a comprehensive overview of:

(a) The relevant provisions of the Convention and decisions of the COP on reporting national communications and BURs from non-Annex I Parties, and the international consultation and analysis (ICA) process, including the technical analysis of BURs, which may contain data and information on the results of activities referred to in decision 1/CP.16, paragraph 70 (referred to as REDD-plus) in a technical annex;[6]

(b) The science, methodologies and approaches that will facilitate a better understanding of the relevant information in BURs on:

(i) Greenhouse gas emissions by sources and removals by sinks;

(ii) Mitigation actions and their effects;

(iii) Constraints and gaps, and related finance, technological and capacity-building needs and support received.

5. With a view to ensuring that the training materials fully respond to the needs of the technical analysis of BURs, the CGE decided to subject the draft materials to peer review

[1] Decision 20/CP.19.
[2] Decision 19/CP.19, paragraph 1.
[3] Decision 20/CP.19, paragraph 4.
[4] Decision 20/CP.19, annex, paragraph 4.
[5] FCCC/SBI/2013/7, paragraph 26.
[6] Decision 14/CP.19, paragraph 7.

by experts who are actively engaged in the process and the preparation of national communications and or BURs.

B. Scope of the note

6. This report contains a summary of the proceedings of the workshop on the peer review of materials to train the TTE, held in Bonn on 26 and 27 October 2014.[7]

C. Possible action by the Subsidiary Body for Implementation

7. The Subsidiary Body for Implementation (SBI) is invited to take note of this report, prepared as part of the progress report on the work of the CGE, contained in document FCCC/SBI/2014/17.

II. Proceedings of the workshop

8. The main objective of this workshop was to provide an opportunity for experts to review the draft training materials and provide feedback to the CGE, with a view to ensuring that the training materials will enable the TTE to fulfil the objectives of the technical analysis of BURs.[8]

9. The workshop was attended by 49 experts from Parties included in Annex I to the Convention (Annex I Parties) and non-Annex I Parties alike, drawn from the UNFCCC roster of experts and former and current CGE members.[9]

10. Mr. Fei Teng (China), Chair of the CGE, opened the workshop on 26 October 2014 and welcomed the experts on behalf of the CGE. He informed participants that the CGE, in responding to the mandate from the COP, focused their efforts in 2014 on designing and developing a training programme that caters to the needs of the technical analysis of BURs. Further, he underscored the evolving nature of the materials and the need for periodic revision that would take into account the lessons learned and experiences gained in the process of and preparation of BURs, new information that may become available and any new developments under the Convention. He encouraged their active participation and highlighted the value of their feedback, which would inform the subsequent revision of the training materials.

11. A representative of the secretariat, welcomed the workshop participants and commended the work undertaken by the CGE in the preparation of the draft materials for training the TTE. He emphasized the need to learn from the experiences from the review of national greenhouse gas (GHG) inventories, national communications and biennial reports from Annex I Parties and the international assessment and review process, including the multilateral assessment, which will commence at COP 20. Further, he highlighted the key role of the CGE in facilitating the efficient and effective conduct of the technical analysis of BURs in the ICA process.

12. The two-day workshop was divided into seven sessions. The first two sessions provided the context for reporting under the Convention, the role of the CGE in implementing the enhanced measurement, reporting and verification (MRV) framework

[7] The workshop agenda is contained in annex I.

[8] See decision 20/CP.19, annex, paragraph 15 for the objectives of the technical analysis.

[9] The list of participants is included in annex II.

and the objective of the peer review workshop. They also included an introduction to BURs, provided information on the ICA process and an overview of the training programme. During the third session, the draft training materials prepared by the CGE, with the assistance of the secretariat, were introduced to the workshop participants. Following this, the experts were organized into three thematic working groups to facilitate the focused peer review of the draft training materials. The themes were as follows:

(a) GHG inventories;

(b) Mitigation actions and their effects;

(c) MRV provisions and support.

13. The members of the CGE moderated the review of the draft materials by the three thematic working groups.

14. In addition to performing an in-depth review of the draft materials within the thematic working groups, the participants also engaged in a discussion, in the workshop plenary, on issues that are of general and cross-cutting nature.

15. The experts were also given an opportunity to submit additional written comments, after the workshop, on the parts of the materials that they were unable to review owing to time constraints and on other modules that they did not review during the workshop. The written comments were to be provided by 5 November 2014.

16. The comments, feedback and observations from the review of the training materials and the subsequent discussions were noted by the CGE and will form the basis for the revision of the draft materials to ensure that they respond fully to the needs of the technical analysis of BURs.

17. In closing, the CGE Chair thanked the participants for their active involvement in the peer review and the suggestions for enhancing the draft training materials. He also accepted the request of the experts to submit to the secretariat further written comments that would also be considered in the revision of the draft materials.

III. Summary of the peer review

18. This chapter provides a summary of the presentations on the training materials and the issues discussed, including feedback from the experts on the content and design of the training materials.

A. Summary of presentations

19. Representatives of the secretariat and of the CGE provided an overview of the relevant context within the Convention and the training programme, in three sessions:

(a) Session I set the context for the workshop through an overview of the enhanced MRV framework for developing countries under the Convention, the objective of the peer review workshop and provided an introduction to BURs and the ICA process. The role of the CGE in implementing the enhanced MRV framework was highlighted, in particular in organizing and developing the training programme to facilitate the capacity-building of the TTE to conduct the technical analysis of BURs;

(b) Session II further elaborated on the enhanced reporting framework, including by providing an overview of the "UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention" (hereinafter called the UNFCCC reporting guidelines on BURs) and the modalities and guidelines for the ICA, including the

composition, modalities and procedures of the ITE for undertaking the technical analysis of BURs. A presentation providing an overview of the training programme covered additional details such as the mandate of the CGE to develop and organize an appropriate training programme for nominated technical experts, and the goals, objectives and the scope of the training programme, including the related structure, access and delivery;

(c) Session III introduced the draft materials to be reviewed by experts and provided an overview of the objectives, scope and general structure of the draft materials, covering the following:

(i) Principles and provisions of the Convention and decisions of the COP relating to the reporting of information in national communications and biennial update reports by non-Annex I Parties and the conducting of ICA, including a technical analysis of BURs, which may contain data and information on the results of REDD-plus activities in a technical annex;[10]

(ii) The science, methodologies and approaches that will facilitate a better understanding of the relevant information in BURs on:

a. GHG emissions by sources and removals by sinks;

b. Mitigation actions and their effects;

c. Constraints and gaps and related finance, technological and capacity-building needs and support received.

B. Summary and outcome of the peer review

20. The experts reviewed the draft training materials in the organized thematic working groups and plenary sessions and engaged in extensive discussion on improvements to both the design and the content.

21. At the outset, the experts acknowledged that the CGE has done commendable work in preparing the draft materials for the training programme. They also recognized that the newly developed training materials could facilitate the efficient and effective conduct of the technical analysis as per the modalities and procedures decided on at COP 19.[11]

22. In general, the peer review exercise resulted in three sets of comments and suggestions for the further enhancement of the draft materials, addressing the following:

(a) Scope and specification of the technical analysis of BURs;

(b) Structure of the training materials;

(c) Correctness and depth of the information contained in the materials covering the science and the commonly used methods and approaches relevant to information reported in BURs. These comments and suggestions were seen as mostly technical in nature.

23. Regarding the scope and specification of the technical analysis of BURs, the experts highlighted the need for the training materials to succinctly explain what the scope of the technical analysis of BURs and the related process should be. To that effect, the experts recommended clearly defining and explaining what the technical analysis of the following three elements listed in decision 20/CP.19, annex, paragraph 15, entails:

[10] Decision 14/CP.19, paragraph 7.
[11] Decision 20/CP.19.

(a) Identifying the extent to which the elements of information listed in paragraph 3(a) of the guidelines contained in decision 2/CP.17, annex IV, are included in the BUR of the Party concerned;

(b) Undertaking a technical analysis of information contained in the BUR as outlined in the UNFCCC reporting guidelines on BURs contained in annex III to decision 2/CP.17, and any additional technical information that may be provided by the Party concerned;

(c) Identifying, in consultation with the Party concerned, capacity-building needs in order to facilitate reporting in accordance with annex III to decision 2/CP.17, participating in ICA in accordance with annex IV to decision 2/CP.17, taking into account Article 4, paragraph 3, of the Convention.

24. As for the structure of the training materials, while the materials were noted to be comprehensive, the experts felt that there is a need to restructure and streamline the information contained in the materials to ensure that the focus is on parts that are critical to the conduct of the technical analysis of BURs by the TTE. Accordingly, the experts suggested organizing each package of the materials in two clusters:

(a) A cluster covering materials that define and explain the scope, process and outcome of the technical analysis of BURs under the ICA process, including the role of the TTE, which should be built around the elements listed in paragraph 23 above;

(b) Another cluster covering materials that supplement the materials referred to in paragraph 24(a) above with additional information on science and the commonly used methodologies and approaches that will facilitate a better understanding of the relevant information reported in BURs by non-Annex I Parties.

25. As far as the correctness and the depth of the information on materials, one of the recurring comments was that the materials are too comprehensive in some parts and may pose a risk of overwhelming the users of these materials. In this context, the suggestion was to ensure the right balance between the depth and the significance of the information, with the focus and emphasis being on elements that are significant. The experts also proposed a number of technical corrections to some parts of the draft materials.

26. During the peer review of the training materials, the experts stressed the need to include some form of a technical competency assessment in the training programme to ensure that the members of the TTE have the necessary skills to perform the technical analysis of BURs. This suggestion is in line with the criteria for the selection of the members of a TTE contained in decision 20/CP.19, annex, paragraph 4, according to which only those nominated experts who have successfully completed the training programme shall be eligible to serve on the TTE.

IV. Conclusions

27. Upon conclusion of the workshop, the CGE, on 28 November 2014, took stock of the comments and suggestions received from the experts over the course of the workshop. Recognizing that these training materials should be evolving and should be updated on a regular basis, the CGE, on the basis of the comments and suggestions from the experts, agreed on the following way forward to enhance the draft materials:

(a) Building on the comments and suggestions from the experts, the CGE will revise the materials with a view to clearly defining and explaining what the technical analysis of the following three elements listed in decision 20/CP.19, annex, paragraph 15, entails and how it would be conducted:

(i) Identifying the extent to which the elements of information listed in paragraph 3(a) of the guidelines contained in decision 2/CP.17, annex IV, are included in the BUR of the Party concerned; this will be addressed through a checklist that aims to analyse the completeness of the information reported and that shall be divided into "shall", "should" and "encourage" categories, as defined in the UNFCCC reporting guidelines on BURs;

(ii) Undertaking a technical analysis of information contained in the BUR as outlined in the UNFCCC reporting guidelines on BURs contained in annex III to decision 2/CP.17, and any additional technical information that may be provided by the Party concerned; this will be addressed by providing a clearer definition of the technical analysis. Guided by the objectives of the BUR and the ICA process, the technical analysis shall address the transparency of information reported in BURs. Further, the information reported on national GHG inventories should also contain an analysis of the consistency of the methods used for developing those inventories with the appropriate methods developed by the Intergovernmental Panel on Climate Change and referred to in the UNFCCC reporting guidelines on BURs;

(iii) Identifying, in consultation with the Party concerned, capacity-building needs in order to facilitate reporting in accordance with annex III to decision 2/CP.17, participating in ICA in accordance with annex IV to decision 2/CP.17, taking into account Article 4, paragraph 3, of the Convention; the starting point for this task should be information reported in the BUR section on constraints and gaps, and related finance, technological and capacity-building needs and support received, as well as areas for improvement, if these are identified in the GHG inventory section by the Party concerned. These needs will be further informed by the outcomes of the two tasks referred to in paragraph 27(a) (i) and (ii) above (completeness check and technical analysis), which should be confirmed with the Party concerned, to ensure that the specific national circumstances and respective capability are taken into account. Furthermore, the Party concerned should be given an opportunity to provide information on additional needs, beyond what is reported in the BUR being analysed;

(b) On the structure of the training materials, the CGE agrees to revise, restructure and streamline each package of the materials, as suggested in paragraph 24 above;

(c) The CGE concurred with the experts' view that there is a need to strike a balance between the depth and the significance of the information and ensure that the focus and emphasis are on elements that are significant. At the same time, the training materials should be able to impart to the experts the skills needed to undertake the technical analysis at the completion of training programme. In addition to considering the technical corrections, the CGE agreed to take this view into consideration in revising the materials.

28. The CGE also took note of the suggestion from the experts to harmonize these training materials and the supplementary CGE training materials for the preparation of BURs[12] to ensure consistency between them.

29. The CGE thanked the experts for their invaluable contribution. It also thanked those developed country Parties included in Annex II to the Convention and other developed country Parties that provided financial resources for the development of the training programme.

[12] The training materials are available at <http://unfccc.int/7915.php>. The CGE will further elaborate on the design and delivery of the training programme, including its aspects relating to the technical competency assessment.

Annex I

Agenda

Sunday, 26 October 2014

8.00 a.m. – 9.30 a.m.	Registration
9.30 a.m. – 10.00 a.m.	Session I. Opening and overview of the workshop • Welcome address – *Mr. Fei Teng, Chair of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE)* • Opening remarks – *Mr. Donald Cooper, secretariat* • Introduction of experts • Overview of the workshop, objectives and agenda – *Mr. William Agyemang-Bonsu, secretariat*
10.00 a.m. – 10.30 a.m.	Coffee break
10.15 a.m. – 12.30 p.m.	Session II. Background and context • Introduction to biennial update reports (BURs) and international consultation and analysis (ICA) – *Mr. Jigme, UNFCCC secretariat* • Overview of the training programme for the team of technical experts – *Mr. Jigme, secretariat* • Question and answer session Session III. Overview of the TTE training materials • Module 1. Principles and provisions of the Convention and decisions of the Conference of the Parties (COP) relating to reporting of national communications and biennial update reports by Parties not included in Annex I to the Convention (non-Annex I Parties) and the conducting of ICA of BURs – *Ms. Ana Maria Danila, CGE* • Module 2. Approaches involved in preparing national communications and biennial update reports using appropriate guidelines adopted by the COP ○ Submodule 2.2. Greenhouse gas (GHG) Inventories – *Mr. Takeshi Enoki, CGE* ○ Submodule 2.2. GHG supplementary-REDD-plus – *Mr. Thiago de Araujo Mendes, CGE* • Question and answer session
12.30 p.m. – 2.00 p.m.	Lunch break
2.00 p.m. – 3.00 p.m.	Session III (cont.). Overview of the TTE training materials • Module 2. Approaches involved in preparing national communications and BURs using appropriate guidelines adopted by the COP ○ Submodule 2.3. Mitigation actions and their effects – *Mr. Elan Strait, CGE* ○ Submodule 2.4. Constraints and gaps, and related finance, technology and capacity-building needs and support received – *Ms. Selam Kidane Abebe, CGE* • Question and answer session

3.00 p.m.– 3.30 p.m.	Coffee break
3.30 p.m. – 6.30 p.m.	Session IV. Peer review in a breakout group setting • Working group I. ○ GHG inventories ○ REDD-plus *Moderators: Mr. Enoki, Ms. Nouf Aburas and Mr. de Araujo Mendes, CGE* • Working group II. ○ Mitigation actions and their effects *Moderators: Mr. Strait and Ms. Anne Nyatichi Omambia, CGE* • Working group III. ○ Constraints and gaps and related financial, technical and capacity needs, including a description of support needed and received *Moderators: Ms. Hilary Hove and Mr. Kamel Djemouai, CGE* ○ Principles and provisions of the Convention and decisions of the Conference of the Parties relating to reporting of national communications and biennial update reports by non-Annex I Parties and the conducting of ICA of BURs *Moderators: Ms. Danila and Mr. George Manful, CGE*

Monday, 27 October 2014

9.00 a.m. – 10.30 a.m.	Session IV (cont.). Peer review • Recap of day 1 • Peer review of the draft TTE training materials (cont.)
10.30 a.m. – 11.00 a.m.	Coffee/tea break
11.00 a.m. – 12.00 p.m.	Session IV (cont.). Peer review
12.00 p.m. – 2.00 p.m.	Lunch break

2.00 p.m. – 3.30 p.m.	Session V. Outcome of the peer review sessions • Working group I. GHG inventories & REDD-plus (*group moderator*) • Question and answer session • Working group II. Mitigation actions and their effects (*group moderator*) • Question and answer session • Working group III. Principles, provisions, decisions and ICA (*group moderator*) ○ Constraints and gaps and related financial, technical and capacity needs, including a description of support needed and received ○ Principles and provisions of the Convention and decisions of the COP relating to the reporting of national communications and BURs by non-Annex I Parties and the conducting of ICA of BURs • Question and answer session
3.30 p.m. – 4.00 p.m.	Coffee/tea break
4.00 p.m. – 5.00 p.m.	Session VI. General plenary discussion *Mr. Teng, CGE Chair*
5.00 p.m. – 6.00 p.m.	Session VII. Summary and next steps *Mr. Teng, CGE Chair*

Annex II

List of participants

Table 1
Experts

Title	*First name*	*Last name*	*Country/organization*
Mr.	Ayite-Lo	Ajavon	Togo
Ms.	Juliana	Bempah	Ghana
Mr.	Rizaldi	Boer	Indonesia
Mr.	Menouer	Boughedaoui	Algeria
Mr.	Michael	Bucki	European Union
Mr.	Leandro	Buendia	Philippines
Mr.	Reagan	Chunga	Namibia
Ms.	Madeleine-Rose	Diouf	Senegal
Mr.	Kamel	Djemouai	Algeria
Mr.	Simon	Eggleston	United Kingdom of Great Britain and Northern Ireland
Ms.	Ann	Gan	Singapore
Ms.	Joyceline	Goco	Philippines
Mr.	Dario	Gomez	Argentina
Mr.	Pavel	Gravilita	Republic of Moldova
Mr.	Sabin	Guendehou	Benin
Ms.	Anoya Udaya	Herath	Sri Lanka
Ms.	Dana	Iliescu	European Union
Mr.	Mahendra	Kumar	Fiji
Ms.	Jenny	Mager Santos	Chile
Ms.	Marilia	Manjate	Mozambique
Ms.	Desai	Mausami	United States of America
Mr.	Abias	Moma-Huongo	Angola
Mr.	Rasack	Nayamuth	Mauritius
Ms.	Lilian	Portillo	Paraguay
Mr.	Andrew	Rakestraw	United States of America
Mr.	Marcelo	Rocha	Brazil
Mr.	W.L.	Sumathipala	Sri Lanka

Title	*First name*	*Last name*	*Country/organization*
Mr.	Vute	Wangwacharakul	Thailand
Mr.	Stanley	Wapot	Vanuatu
Mr.	Jongikhaya	Witi	South Africa

Table 2
Members of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention

Title	*First name*	*Last name*	*Country/organization*
Ms.	Selam Kidane	Abebe	Ethiopia
Ms.	Nouf A.	Aburas	Saudi Arabia
Ms.	Ana Maria	Danila	European Union
Mr.	Thiago	De Araujo Mendes	Brazil
Mr.	Kamel	Djemouai	Algeria
Mr.	Takeshi	Enoki	Japan
Ms.	Hilary	Hove	Canada
Mr.	Kanizio Fredrick	Kahema Manyika	United Republic of Tanzania
Mr.	George	Manful	United Nations Environment Programme
Ms.	Rhianna M.	Neely	Bahamas
Ms.	Anne Nyatichi	Omambia	Kenya
Mr.	Elan	Strait	United States of America
Ms.	Umayra	Taghiyeva	Azerbaijan
Mr.	Muhammad Irfan	Tariq	Pakistan
Mr.	Fei	Teng	China

Table 3
Resource persons

Title	*First name*	*Last name*	*Country/organization*
Mr.	Philip	Acquah	Ghana
Mr.	Gonçalo	Cavalheiro	Portugal
Ms.	Carly	Green	Australia
Mr.	Marion	Vieweg	Germany

United Nations

FCCC/SBI/2014/20

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Item 3(e) of the provisional agenda
Reporting from and review of Parties included in Annex I to the Convention
Report on national greenhouse gas inventory data from Parties included in Annex I to the Convention for the period 1990–2012

National greenhouse gas inventory data for the period 1990–2012

Note by the secretariat*

Summary

All 43 Parties included in Annex I to the Convention (Annex I Parties) submitted their greenhouse gas (GHG) inventory common reporting format (CRF) tables and national inventory reports (NIRs) in 2014. By the deadline of 15 April 2014, CRF tables from all 43 Parties and NIRs from 40 Parties had been received. Over the period 1990–2012, total aggregate GHG emissions excluding emissions and removals from land use, land-use change and forestry (LULUCF) for all Annex I Parties decreased by 10.6 per cent, while total GHG emissions and removals including LULUCF decreased by 16.2 per cent. For Annex I Parties with economies in transition, GHG emissions excluding and including LULUCF decreased by 38.1 per cent and 49.7 per cent, respectively. For Annex I Parties that do not have economies in transition, GHG emissions excluding and including LULUCF increased by 1.9 per cent and 0.3 per cent, respectively. The information in this document is based on information in the national GHG inventory submissions of Annex I Parties received as at 20 October 2014. At the time of the publication of this document, the annual review process for GHG inventories from Annex I Parties was still ongoing; therefore, the data included in this document may not reflect the latest information provided by Parties. The latest GHG inventory data are available on the UNFCCC website.

* This document was submitted after the due date in order to take into account the latest submissions from Parties.

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I. Introduction

A. Mandate

1. The Conference of the Parties (COP), by decisions 9/CP.2, 3/CP.5 and 18/CP.8, requested Parties included in Annex I to the Convention (Annex I Parties) to submit national inventory data on greenhouse gas (GHG) emissions by sources and removals by sinks by 15 April each year. Under the "Guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention", adopted by the COP in decision 19/CP.8, the secretariat was requested[1] to prepare annually a report on GHG inventory data submitted by Annex I Parties, for consideration by the COP and the Subsidiary Body for Implementation (SBI).

B. Scope of the note

2. This document shows the status of reporting of GHG inventories by Annex I Parties in 2014 (chapter II) and provides a summary of the latest available data on GHG emissions and removals for the period 1990–2012 (chapter III). Data are provided for carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O), as well as for hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6) taken together. Data are also provided on total[2] aggregate[3] GHG emissions, both including and excluding net GHG emissions and removals from land use, land-use change and forestry (LULUCF).

3. The information provided in this document is based on information in the national GHG inventories received from all 43 Annex I Parties as at 20 October 2014.

4. At the time of the publication of this document, the annual review process was still ongoing; therefore, the data presented here may not reflect the latest information provided by Parties. The latest GHG inventory data are available on the UNFCCC website.[4]

C. Possible action by the Subsidiary Body for Implementation and the Conference of the Parties

5. The SBI may wish to take note of the information contained in this document and seek further guidance from the COP, as appropriate.

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[1] FCCC/CP/2002/8, annex II, paragraphs 42 and 43.

[2] The term "total" implies that emissions from the sectors of the common reporting format are summed; the inclusion of emissions from land use, land-use change and forestry in the sum is indicated separately.

[3] The term "aggregate" implies that GHG emissions and removals are calculated as a weighted sum of CO_2, CH_4, N_2O, HFCs, PFCs and SF_6, using the global warming potentials agreed under the Convention.

[4] <http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/8108.php>.

II. Status of reporting

A. Timeliness and completeness of submissions

6. In accordance with the UNFCCC Annex I reporting guidelines on annual inventories,[5] Annex I Parties are required to submit annually a national inventory report (NIR) and common reporting format (CRF) tables containing data from the base year up to two years prior to the year of submission. In 2014, all 43 Annex I Parties provided GHG data for all years from 1990[6] to 2012.

7. By the due date of 15 April 2014, CRF tables had been received from all 43 Parties and NIRs had been received from 40 Parties. Within six weeks of that deadline, a total of 42 Parties had submitted their NIRs; while Monaco submitted its NIR after that six-week period, on 30 June 2014. The dates of the initial submissions of the CRF tables are shown in table 1.

Table 1
Greenhouse gas inventory submissions from Annex I Parties in 2014

Party	*CRF submission date*[a]	*Party*	*CRF submission date*[a]
Australia	15 April 2014	Liechtenstein	15 April 2014
Austria	14 April 2014	Lithuania	15 April 2014
Belarus	15 April 2014	Luxembourg	15 April 2014
Belgium	10 April 2014	Malta	9 April 2014
Bulgaria	15 April 2014	Monaco	15 April 2014
Canada	11 April 2014	Netherlands	15 April 2014
Croatia	11 April 2014	New Zealand	11 April 2014
Cyprus	15 April 2014	Norway	10 April 2014
Czech Republic	15 April 2014	Poland	11 April 2014
Denmark	15 April 2014	Portugal	15 April 2014
Estonia	15 April 2014	Romania	12 April 2014
European Union	15 April 2014	Russian Federation	15 April 2014
Finland	15 April 2014	Slovakia	15 April 2014
France	15 April 2014	Slovenia	15 April 2014
Germany	15 April 2014	Spain	15 April 2014
Greece	15 April 2014	Sweden	11 April 2014
Hungary	15 April 2014	Switzerland	15 April 2014
Iceland	15 April 2014	Turkey	15 April 2014
Ireland	15 April 2014	Ukraine	12 April 2014
Italy	4 April 2014	United Kingdom	15 April 2014
Japan	15 April 2014	United States	12 April 2014
Latvia	15 April 2014		

Abbreviation: CRF = common reporting format.

[a] The dates of submission of the national inventory report may be different.

[5] "Updated UNFCCC reporting guidelines on annual inventories following incorporation of the provisions of decision 14/CP.11" (FCCC/SBSTA/2006/9).

[6] Unless otherwise specified, base year data are used instead of 1990 data. The Parties that may use a base year other than 1990, as stipulated in decisions 9/CP.2 and 11/CP.4, provided data for their respective base years. Such Parties and their base years are Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986).

8. After the initial submissions, 17 Parties submitted revised versions of their CRF tables and 15 Parties resubmitted their NIRs.

B. Recalculations

9. In accordance with the UNFCCC Annex I reporting guidelines on annual inventories, Parties should, where necessary, conduct recalculations in order to improve the quality of their emission estimates and ensure the consistency of the time series.

10. In 2014 all Annex I Parties, with the exception of Belarus (excluding and including LULUCF) and Turkey (excluding LULUCF), reported recalculations that had an impact on their estimated GHG emissions for 1990 (see table 2). The recalculations resulted from changes in activity data, emission factors and methodologies. For total aggregate GHG emissions excluding LULUCF, the change was less than 1 per cent for 33 Parties and more than 2 per cent for three Parties. For total aggregate GHG emissions including LULUCF, the change was less than 1 per cent for 20 Parties and more than 5 per cent for seven Parties.

Table 2
Inventory recalculations by Annex I Parties in 2014

Party	*Impact on GHG emissions for 1990 excluding LULUCF (%)*	*Impact on GHG emissions for 1990 including LULUCF (%)*
Australia	–0.66	4.09
Austria	–0.09	–0.03
Belarus	0	0
Belgium	–0.19	–0.13
Bulgaria	–0.05	0.46
Canada	–0.03	–1.81
Croatia	0.77	0.58
Cyprus	–0.05	–0.05
Czech Republic	–0.02	0.07
Denmark	–0.10	–0.34
Estonia	0.21	0.35
European Union	0.93	0.91
Finland	–0.18	2.47
France	–0.01	–1.10
Germany	–0.18	0.74
Greece	0.33	0.72
Hungary	–1.66	–1.65
Iceland	–0.49	–0.29
Ireland	0.002	0.66
Italy	0.01	1.70
Japan	–2.59	–2.51
Latvia	–0.38	58.40
Liechtenstein	–0.95	–0.99
Lithuania	–0.07	–0.09
Luxembourg	0.000	0.000
Malta	–0.73	1.88
Monaco	1.05	1.05

Party	Impact on GHG emissions for 1990 excluding LULUCF (%)	Impact on GHG emissions for 1990 including LULUCF (%)
Netherlands	0.000	0.01
New Zealand	1.50	–26.06
Norway	0.09	14.69
Poland	1.11	–0.21
Portugal	–0.30	–15.80
Romania	4.29	7.13
Russian Federation	0.34	2.66
Slovakia	2.01	3.98
Slovenia	–0.04	69.56
Spain	0.34	–1.23
Sweden	–0.03	–4.33
Switzerland	–0.09	2.37
Turkey	0	–16.58
Ukraine	1.11	1.20
United Kingdom	0.73	0.46
United States	0.81	0.25

Abbreviations: GHG = greenhouse gas, LULUCF = land use, land-use change and forestry

11. Table 3 presents a comparison of the estimates of total aggregate GHG emissions in 1990 reported in document FCCC/SBI/2013/19, containing information from Annex I Parties' 2013 GHG inventory submissions, and those reported in the present document on the basis of information in those Parties' 2014 submissions.

Table 3

Comparison of estimates reported in 2013 and 2014 of total aggregate greenhouse gas emissions of Annex I Parties in 1990

	2013	*2014*	*Explanation of the difference between the estimates reported in 2013 and 2014*
Total aggregate GHG emissions excluding LULUCF (thousands of Tg CO_2 eq)			
All Annex I Parties	19.00	19.07	Aggregate impact of inventory recalculations conducted by individual Annex I Parties
Annex I EIT Parties	5.93	5.97	Inventory recalculations, for example by Romania, the Russian Federation and Ukraine
Annex I non-EIT Parties	13.07	13.10	Inventory recalculations, for example by the United Kingdom and the United States of America
Total aggregate GHG emissions including LULUCF (thousands of Tg CO_2 eq)			
All Annex I Parties	17.87	17.98	Aggregate impact of inventory recalculations conducted by individual Annex I Parties
Annex I EIT Parties	5.81	5.94	Inventory recalculations, for example by Romania, the Russian Federation and Ukraine
Annex I non-EIT Parties	12.07	12.04	Inventory recalculations, for example by Japan, Portugal and Turkey

Abbreviations: EIT = economies in transition, GHG = greenhouse gas, LULUCF = land use, land-use change and forestry

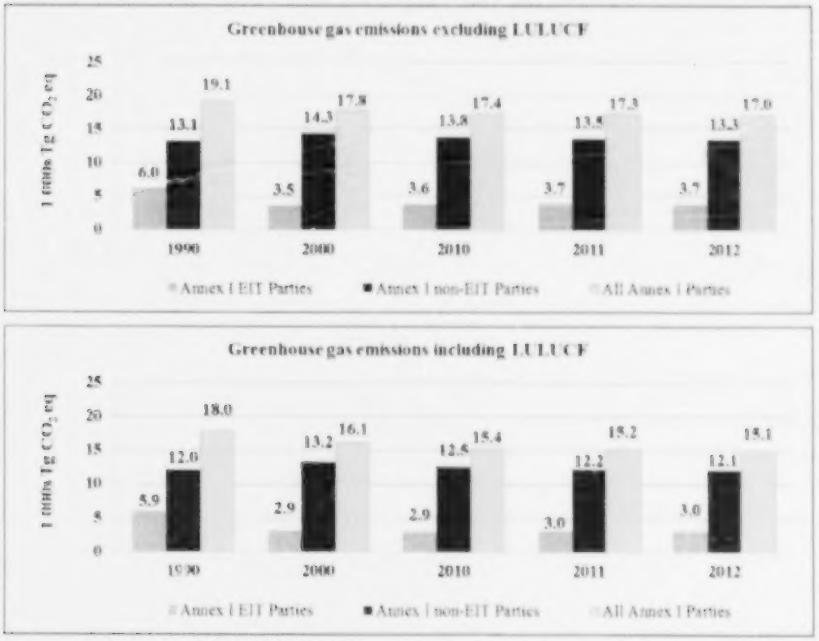
III. Overview of emission trends and sources in Annex I Parties

A. Total aggregate greenhouse gas emissions

12. Figures 1 and 2 show the trends in total aggregate GHG emissions from 1990 to 2012 for all Annex I Parties taken together, for Annex I Parties with economies in transition (Annex I EIT Parties) and for Annex I Parties that do not have economies in transition (Annex I non-EIT Parties).

13. From 1990 to 2012, total aggregate GHG emissions excluding emissions and removals from LULUCF for all Annex I Parties decreased by 10.6 per cent, from 19,069.7 Tg[7] CO_2 eq to 17,041.1 Tg CO_2 eq. During the same period, total aggregate GHG emissions including LULUCF decreased by 16.2 per cent, from 17,981.4 Tg CO_2 eq to 15,068.8 Tg CO_2 eq. From 2000 to 2012, GHG emissi ns excluding and including LULUCF decreased by 4.2 per cent and 6.5 per cent, respectively. Between 2011 and 2012, GHG emissions decreased by 1.3 per cent excluding LULUCF and by 1.0 per cent including LULUCF.

Figure 1
Greenhouse gas emissions of Annex I Parties, 1990, 2000, 2010, 2011 and 2012

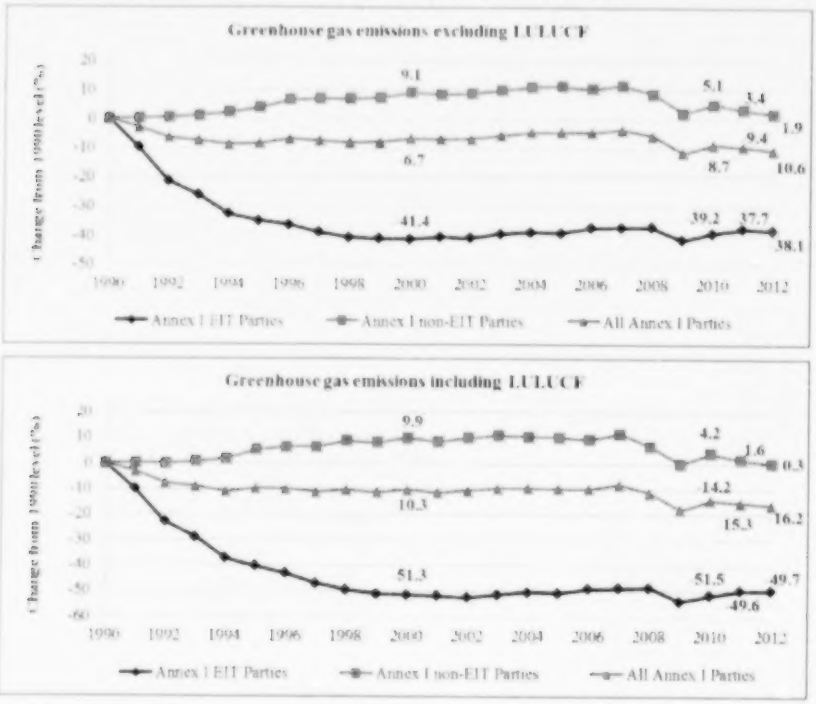


Abbreviations: EIT = economies in transition, LULUCF = land use, land-use change and forestry.

[7] One teragram (Tg) equals one million tonnes.

Figure 2

Changes in greenhouse gas emissions of Annex I Parties, 1990–2012



Abbreviations: EIT = economies in transition, LULUCF = land use, land-use change and forestry

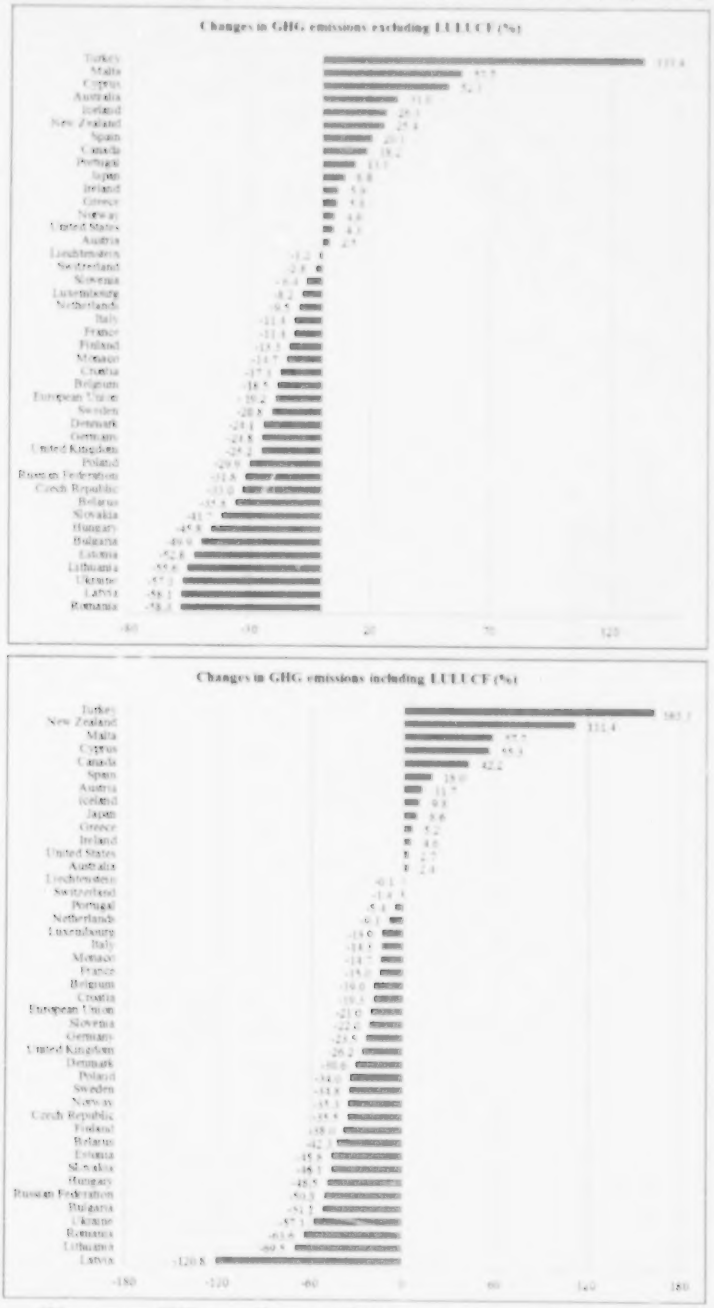
14. For Annex I EIT Parties, GHG emissions from 1990 to 2012 decreased by 38.1 per cent excluding LULUCF and by 49.7 per cent including LULUCF. From 2000 to 2012, GHG emissions excluding and including LULUCF increased by 5.7 per cent and 3.3 per cent, respectively. Between 2011 and 2012, GHG emissions decreased by 0.6 per cent excluding LULUCF and by 0.1 per cent including LULUCF.

15. For Annex I non-EIT Parties, from 1990 to 2012 GHG emissions increased by 1.9 per cent excluding LULUCF and by 0.3 per cent including LULUCF. From 2000 to 2012, GHG emissions excluding and including LULUCF decreased by 6.7 per cent and 8.7 per cent, respectively. Between 2011 and 2012, GHG emissions showed a decrease of 1.5 per cent excluding LULUCF and of 1.3 per cent including LULUCF.

16. The changes in total aggregate GHG emissions over the period 1990–2012 varied considerably among Parties (see figure 3). The largest decrease in emissions excluding LULUCF was in Romania (by 58.3 per cent), while the largest decrease in emissions including LULUCF was in Latvia (by 120.8 per cent). On the other hand, the greatest increase in emissions, both excluding LULUCF (by 133.4 per cent) and including LULUCF (by 163.3 per cent), occurred in Turkey.

Figure 3

Changes in total aggregate emissions of individual Annex I Parties, 1990–2012



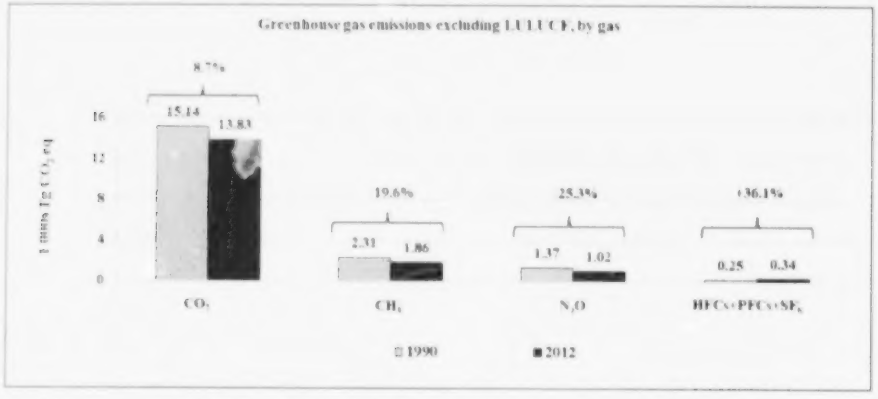
Abbreviations: GHG = greenhouse gas, LULUCF = land use, land-use change and forestry

B. Greenhouse gas emissions by gas

17. Throughout the period 1990–2012, CO_2 accounted for the largest share of total emissions, contributing 79.4 per cent in 1990 and 81.3 per cent in 2012. CH_4 was the second-highest contributor to total GHG emissions (12.1 per cent in 1990 and 10.9 per cent in 2012), followed by N_2O (7.2 per cent in 1990 and 6.0 per cent in 2012). The emissions of HFCs, PFCs and SF_6 taken together contributed less than 2 per cent of the total GHG emissions in both years.

18. Figure 4 shows the contribution of each GHG to the total emissions excluding LULUCF for 1990 and 2012 and the changes in the total emissions of each GHG over the period 1990–2012. Emissions of CO_2, CH_4 and N_2O decreased, while emissions of HFCs, PFCs and SF_6 taken together increased by 36.1 per cent.

Figure 4
Greenhouse gas emissions excluding land use, land-use change and forestry of Annex I Parties by gas, 1990 and 2012



Abbreviation: LULUCF = land use, land-use change and forestry.

19. Between 2011 and 2012, emissions of CO_2, CH_4 and N_2O decreased by 1.5 per cent, 0.9 per cent and 1.3 per cent, respectively. During the same period, emissions of HFCs, PFCs and SF_6 taken together increased by 3.3 per cent.

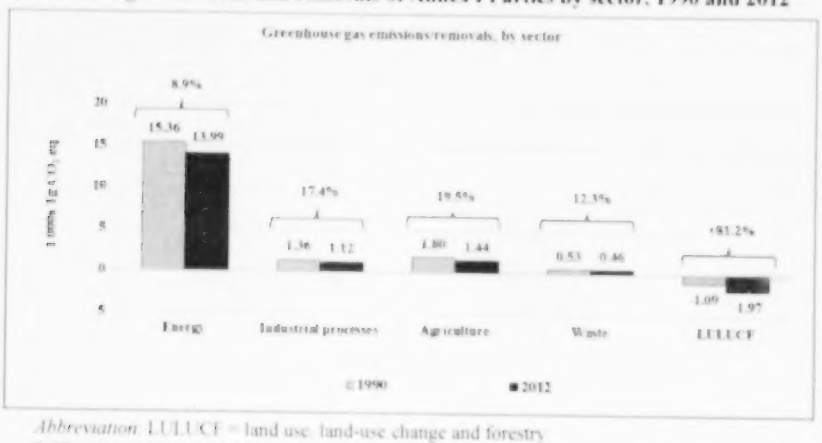
C. Greenhouse gas emissions by sector

20. From 1990 to 2012, emissions from the energy, industrial processes, agriculture and waste sectors decreased (see figure 5). The agriculture sector experienced the largest decrease in emissions (by 19.5 per cent), followed by the industrial processes, waste and energy sectors. Over the same period, net GHG removals from LULUCF increased by 81.2 per cent, from −1,088.3 Tg CO_2 eq to −1,972.3 Tg CO_2 eq.

21. Between 2011 and 2012, emissions from the energy, industrial processes and waste sectors decreased by 1.5 per cent, 1.3 per cent and 1.3 per cent, respectively. Emissions from the agriculture sector increased by 0.1 per cent. Net GHG removals from LULUCF decreased by 3.5 per cent.

Figure 5

Greenhouse gas emissions and removals of Annex I Parties by sector, 1990 and 2012[a]



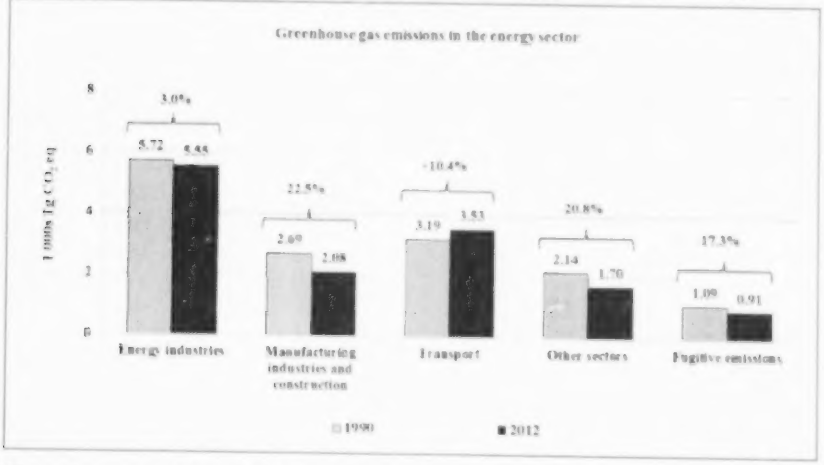
Abbreviation: LULUCF = land use, land-use change and forestry.

[a] The solvent and other product use sector is not included in this figure because its contribution to the total GHG emissions is very small. The emissions from this sector decreased by 32.9 per cent between 1990 and 2012.

22. Within the energy sector, from 1990 to 2012, GHG emissions decreased in all subsectors except transport, where emissions increased by 10.4 per cent (see figure 6). The largest emission reduction occurred in manufacturing industries and construction (where emissions decreased by 22.5 per cent).

Figure 6

Greenhouse gas emissions of Annex I Parties in the energy sector, 1990 and 2012

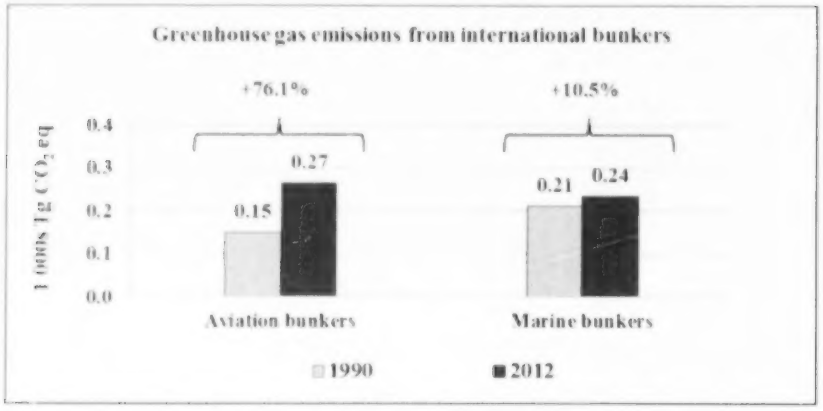


23. Between 2011 and 2012, emissions from all energy subsectors (namely energy industries, manufacturing industries and construction, transport, fugitive emissions and other sectors) decreased.

24. Over the period 1990–2012, emissions from international bunkers increased, by 76.1 per cent for aviation and by 10.5 per cent for marine transportation (see figure 7).

Figure 7

Greenhouse gas emissions from international bunker fuels for Annex I Parties, 1990 and 2012



25. Between 2011 and 2012, emissions from international bunkers decreased, by 0.5 per cent for aviation and by 8.2 per cent for marine transportation.

26. A comparison of the percentage changes in the total aggregate GHG emissions from 1990 to the latest available year reported in document FCCC/SBI/2013/19, using information from Annex I Parties' 2013 inventory submissions, and those reported in the present document, using information from those Parties' 2014 inventory submissions, is presented in table 4. It also provides explanations for the differences in the estimates.

Table 4

Comparison of the changes in the total aggregate greenhouse gas emissions of Annex I Parties reported in 2013 and 2014

	2013	*2014*	*Explanation of the difference between the estimates reported in 2013 and 2014*
Changes in total aggregate GHG emissions excluding LULUCF from 1990 to the latest available year (%)			
All Annex I Parties	–9.3	–10.6	Combined impact of changes for individual Annex I Parties
Annex I EIT Parties	–36.8	–38.1	Decreases in emissions between 2011 and 2012, for example in Bulgaria, Poland and Ukraine
Annex I non-EIT Parties	3.2	1.9	Decreases in emissions between 2011 and 2012, for example in Finland, Italy and the United States of America
Changes in total aggregate GHG emissions including LULUCF from 1990 to the latest available year (%)			
All Annex I Parties	14.5	16.2	Combined impact of changes for individual Annex I Parties
Annex I EIT Parties	–49.1	–49.7	Decreases in emissions between 2011 and 2012, for example in Bulgaria, Hungary and Ukraine
Annex I non-EIT Parties	2.1	0.3	Decreases in emissions between 2011 and 2012, for example in Canada, Italy and the United States of America

Abbreviations: EIT = economies in transition, GHG = greenhouse gas, LULUCF = land use, land-use change and forestry

D. Emission data for individual Annex I Parties

27. Tables 5–16 show detailed GHG data for individual Annex I Parties. Total aggregate GHG emissions excluding and including emissions and removals from LULUCF are provided in tables 5 and 6; emissions of CO_2, CH_4 and N_2O (excluding and including emissions and removals from LULUCF) are provided in tables 7–12; emissions of HFCs, PFCs and SF_6 taken together are provided in table 13; and emissions and removals from LULUCF are provided in tables 14–16.

28. Blank cells in the tables denote that either data were not available or notation keys, such as "NO" (not occurring), "NE" (not estimated), "NA" (not applicable), "IE" (included elsewhere) or "C" (confidential), were used to report emission data. Negative values denote removals; positive values denote emissions.

29. The changes in emissions from 1990 to 2012 were calculated using the exact (not rounded) values and may therefore differ from a ratio calculated with the rounded numbers provided in the tables. An en dash (–) signifies a percentage change exceeding 10,000 per cent.

Table 5

Total aggregate anthropogenic emissions of CO_2, CH_4, N_2O, HFCs, PFCs and SF_6 excluding emissions/removals from land use, land-use change and forestry, 1990, 2000, 2010, 2011 and 2012

	Gg CO_2 equivalent					*Change from 1990*
Party	*1990*	*2000*	*2010*	*2011*	*2012*	*to 2012 (%)*
Australia	414 974	489 813	540 211	541 543	543 648	31.0
Austria	78 086	80 277	84 808	82 761	80 059	2.5
Belarus*	139 151	79 165	89 426	87 500	89 283	–35.8
Belgium	142 952	145 857	130 611	120 146	116 520	–18.5
Bulgaria*[a]	121 880	59 471	60 272	65 996	61 046	–49.9
Canada	590 908	721 362	699 302	701 212	698 626	18.2
Croatia*	31 938	26 626	28 893	28 542	26 419	–17.3
Cyprus	6 088	8 904	9 989	9 682	9 259	52.1
Czech Republic*	196 146	146 330	137 008	135 277	131 466	–33.0
Denmark	70 020	69 955	63 007	58 052	53 118	–24.1
Estonia*	40 626	17 160	19 893	20 485	19 189	–52.8
European Union[b]	5 626 260	5 121 652	4 751 060	4 603 245	4 544 224	–19.2
Finland	70 329	69 188	74 397	66 861	60 966	–13.3
France	560 384	564 597	522 156	495 982	496 396	–11.4
Germany	1 248 049	1 040 367	946 388	928 695	939 083	–24.8
Greece	104 936	126 588	117 886	114 737	110 994	5.8
Hungary*[a]	114 447	76 504	67 638	66 034	61 981	–45.8
Iceland	3 538	3 903	4 646	4 441	4 468	26.3
Ireland	55 246	68 216	61 895	57 750	58 531	5.9
Italy	519 055	551 237	499 359	486 601	460 083	–11.4
Japan	1 234 320	1 340 523	1 256 095	1 306 518	1 343 118	8.8
Latvia*	26 213	9 994	11 988	11 140	10 978	–58.1
Liechtenstein	228	251	230	216	225	–1.2
Lithuania*	48 721	19 632	21 119	21 680	21 622	–55.6
Luxembourg	12 901	9 762	12 250	12 125	11 839	–8.2
Malta	1 992	2 551	2 994	3 027	3 140	57.7
Monaco	110	122	92	90	93	–14.7
Netherlands	211 850	213 023	209 286	195 064	191 669	–9.5
New Zealand	60 641	70 899	73 491	74 393	76 048	25.4
Norway	50 409	54 058	54 347	53 294	52 733	4.6
Poland*[a]	569 904	396 104	407 475	405 741	399 268	–29.9
Portugal	60 767	84 100	70 634	69 317	68 752	13.1
Romania*[a]	285 048	134 074	115 799	121 514	118 764	–58.3
Russian Federation*	3 363 342	2 053 321	2 221 342	2 284 293	2 295 045	–31.8
Slovakia*	73 227	48 947	45 382	44 698	42 710	–41.7
Slovenia*[a]	20 195	18 953	19 411	19 463	18 911	–6.4
Spain	283 749	380 004	347 181	345 887	340 809	20.1
Sweden	72 731	68 569	65 079	60 761	57 610	–20.8
Switzerland	53 000	51 821	54 148	50 028	51 493	–2.8
Turkey[c]	188 434	298 091	403 495	424 091	439 874	133.4
Ukraine*	940 175	412 496	385 601	408 448	401 019	–57.3
United Kingdom	783 412	704 435	613 218	569 273	586 357	–25.2
United States	6 219 524	7 075 609	6 854 728	6 716 993	6 487 847	4.3
Number of Parties showing a decrease in emissions by more than 1 per cent						*28*
Number of Parties showing a change in emissions within 1 per cent						*0*
Number of Parties showing an increase in emissions by more than 1 per cent						*15*

* A Party with an economy in transition.

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member States.

[c] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.

Table 6

Total aggregate anthropogenic emissions of CO_2, CH_4, N_2O, HFCs, PFCs and SF_6 including emissions/removals from land use, land-use change and forestry, 1990, 2000, 2010, 2011 and 2012

	Gg CO_2 equivalent					*Change from 1990*
Party	*1990*	*2000*	*2010*	*2011*	*2012*	*to 2012 (%)*
Australia	545 495	513 027	568 802	480 894	558 809	2.4
Austria	68 209	65 046	80 915	78 890	76 221	11.7
Belarus*	110 577	48 262	59 247	58 266	63 783	–42.3
Belgium	142 118	145 264	129 345	118 978	115 139	–19.0
Bulgaria*[a]	108 093	51 134	52 003	57 602	52 838	–51.1
Canada	519 888	669 850	775 045	778 022	739 487	42.2
Croatia*	25 428	19 048	21 888	22 394	20 528	–19.3
Cyprus	5 949	8 754	9 931	9 606	9 240	55.3
Czech Republic*	192 708	139 050	131 825	128 265	124 214	–35.5
Denmark	75 303	73 190	62 684	55 310	52 281	–30.6
Estonia*	31 806	18 967	15 314	17 602	17 238	–45.8
European Union[c]	5 367 940	4 819 245	4 439 385	4 291 788	4 240 671	–21.0
Finland	56 654	50 016	50 305	42 747	35 113	–38.0
France	531 764	539 104	485 390	456 280	452 142	–15.0
Germany	1 223 531	1 016 400	941 694	924 608	935 595	–23.5
Greece	102 821	124 580	115 031	111 806	108 129	5.2
Hungary*[a]	111 892	75 895	63 699	62 392	57 574	–48.5
Iceland	4 713	4 919	5 437	5 187	5 174	9.8
Ireland	52 934	67 378	58 037	54 111	55 386	4.6
Italy	515 446	534 263	468 239	467 463	441 527	–14.3
Japan	1 167 502	1 254 874	1 183 737	1 230 930	1 268 052	8.6
Latvia*	6 346	–4 097	858	–691	–1 323	–120.8
Liechtenstein	219	242	223	209	218	–0.1
Lithuania*	44 427	10 245	10 637	11 105	13 546	–69.5
Luxembourg	13 249	9 377	11 823	11 694	11 405	–13.9
Malta	1 987	2 544	2 987	3 020	3 133	57.7
Monaco	110	122	92	90	93	–14.7
Netherlands	214 863	215 395	212 593	198 468	195 205	–9.1
New Zealand	23 391	38 549	41 741	44 799	49 450	111.4
Norway	40 262	30 152	27 577	25 682	26 056	–35.3
Poland*[a]	556 907	365 504	378 321	370 124	367 413	–34.0
Portugal	58 478	74 051	55 402	52 908	55 302	–5.4
Romania*[a]	269 756	108 396	91 209	98 468	98 220	–63.6
Russian Federation*	3 527 913	1 646 819	1 654 100	1 710 856	1 753 029	–50.3
Slovakia*	64 219	39 193	39 798	38 494	34 607	–46.1
Slovenia*[a]	18 669	13 600	14 993	15 064	14 555	–22.0
Spain	260 444	348 824	313 570	312 196	307 280	18.0
Sweden	34 027	26 059	29 942	25 174	22 192	–34.8
Switzerland	51 078	51 833	53 214	48 131	50 364	–1.4
Turkey[b]	144 364	248 032	345 647	363 265	380 059	163.3
Ukraine*	870 438	361 665	347 660	401 993	373 809	–57.1
United Kingdom	785 291	702 343	605 969	561 788	579 379	–26.2
United States	5 402 124	6 414 839	5 906 734	5 772 687	5 546 304	2.7
Number of Parties showing a decrease in emissions by more than 1 per cent						*29*
Number of Parties showing a change in emissions within 1 per cent						*1*
Number of Parties showing an increase in emissions by more than 1 per cent						*13*

* A Party with an economy in transition.

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[c] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member States.

[b] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.

Table 7

Total anthropogenic CO_2 emissions excluding emissions/removals from land use, land-use change and forestry, 1990, 2000, 2010, 2011 and 2012

	Gg CO_2 equivalent					*Change from 1990*
Party	*1990*	*2000*	*2010*	*2011*	*2012*	*to 2012 (%)*
Australia	276 138	346 621	399 365	398 161	397 831	44.1
Austria	62 018	65 993	72 366	70 354	67 733	9.2
Belarus[a]	103 807	53 319	58 298	55 381	57 491	-44.6
Belgium	118 989	125 152	113 429	104 271	100 659	-15.4
Bulgaria[a]	90 092	45 523	47 721	53 197	48 364	-46.3
Canada	459 038	567 738	554 408	557 290	550 547	19.9
Croatia[a]	23 340	20 100	21 330	20 918	19 233	-17.6
Cyprus	4 627	7 038	7 832	7 566	7 083	53.1
Czech Republic[a]	164 694	126 130	117 141	115 069	111 302	-32.4
Denmark	54 200	55 277	50 420	45 475	40 790	-24.7
Estonia[a]	36 701	15 149	17 803	18 427	17 079	-53.5
European Union[c]	4 437 028	4 135 980	3 907 816	3 767 424	3 717 117	-16.2
Finland	56 644	56 829	63 488	56 403	50 733	-10.4
France	398 770	415 079	391 076	364 819	368 845	-7.5
Germany	1 042 066	891 516	829 402	810 441	821 718	-21.1
Greece	82 998	102 572	96 758	94 251	90 472	9.0
Hungary[a,b]	84 178	58 081	51 668	49 859	46 072	-45.4
Iceland	2 160	2 776	3 432	3 333	3 324	53.9
Ireland	32 424	44 689	41 292	37 716	38 011	17.2
Italy	434 656	462 278	424 993	413 379	386 667	-11.0
Japan	1 141 138	1 251 461	1 191 067	1 240 632	1 275 611	11.8
Latvia[a]	19 052	6 968	8 500	7 751	7 433	-61.0
Liechtenstein	201	223	194	180	189	-6.1
Lithuania[a]	35 785	11 834	13 692	14 029	14 182	-60.4
Luxembourg	11 950	8 780	11 255	11 138	10 870	-9.0
Malta	1 867	2 345	2 640	2 668	2 807	50.3
Monaco	105	113	82	79	83	-21.1
Netherlands	159 236	169 921	181 351	168 058	165 262	3.8
New Zealand	24 916	31 311	33 451	33 259	34 258	37.5
Norway	34 836	41 800	45 537	44 572	44 101	26.6
Poland[a,b]	469 414	318 749	329 622	327 723	320 862	-31.6
Portugal	45 013	65 746	52 492	51 155	50 310	11.8
Romania[a,b]	207 007	92 857	79 800	85 605	83 861	-59.5
Russian Federation[a]	2 505 380	1 476 998	1 602 426	1 648 129	1 656 774	-33.9
Slovakia[a]	61 805	41 033	37 431	37 233	35 238	-43.0
Slovenia[a,b]	16 356	15 213	16 136	16 178	15 675	-4.2
Spain	227 508	308 026	280 378	280 923	276 637	21.6
Sweden	57 143	54 134	52 283	48 483	45 713	-20.0
Switzerland	44 639	43 952	45 923	41 848	43 251	-3.1
Turkey[d]	141 560	225 609	326 849	345 734	357 498	152.5
Ukraine[a]	718 894	293 509	289 664	305 464	302 749	-57.9
United Kingdom	591 499	556 667	504 998	464 036	483 424	-18.3
United States	5 100 606	5 963 063	5 712 757	5 583 379	5 375 603	5.4
Number of Parties showing a decrease in emissions by more than 1 per cent						*27*
Number of Parties showing a change in emissions within 1 per cent						*0*
Number of Parties showing an increase in emissions by more than 1 per cent						*16*

[a] A Party with an economy in transition.

[b] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[c] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member States.

[d] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.

Table 8

Total anthropogenic CO_2 emissions including emissions/removals from land use, land-use change and forestry[a] 1990, 2000, 2010, 2011 and 2012

	Gg CO_2 equivalent					*Change from 1990*
Party	*1990*	*2000*	*2010*	*2011*	*2012*	*to 2012 (%)*
Australia	399 908	365 792	422 392	334 807	407 127	1.8
Austria	52 120	50 743	68 449	66 458	63 870	22.5
Belarus*	75 207	22 387	28 095	26 126	31 969	–57.5
Belgium	118 141	124 511	112 069	102 933	99 172	–16.1
Bulgaria*[b]	76 187	36 860	39 313	44 661	39 993	–47.5
Canada	382 119	512 865	612 826	616 538	575 009	50.5
Croatia*	16 808	12 457	14 315	14 751	13 304	–20.8
Cyprus	4 485	6 883	7 755	7 474	7 038	56.9
Czech Republic*	161 139	118 745	111 816	107 991	103 979	–35.5
Denmark	59 466	58 498	50 085	42 721	39 948	–32.8
Estonia*	27 879	16 952	13 218	15 537	15 121	–45.8
European Union[c]	4 167 603	3 821 423	3 585 152	3 444 809	3 401 452	–18.4
Finland	41 674	36 326	38 013	30 903	23 499	–43.6
France	367 626	385 762	350 851	321 600	321 039	–12.7
Germany	1 017 136	867 139	824 231	805 862	817 718	–19.6
Greece	80 838	100 411	93 892	91 304	87 571	8.3
Hungary*[b]	81 784	57 395	47 667	46 138	41 589	–49.1
Iceland	3 265	3 712	4 136	3 991	3 942	20.7
Ireland	30 074	43 798	37 344	33 998	34 788	15.7
Italy	429 213	444 257	393 426	393 585	366 803	–14.5
Japan	1 074 239	1 165 774	1 118 699	1 165 033	1 200 539	11.8
Latvia*	–1 012	–7 453	–2 915	–4 339	–5 125	406.4
Liechtenstein	191	214	187	173	182	–5.1
Lithuania*	31 441	2 385	3 171	3 411	6 058	–80.7
Luxembourg	12 295	8 392	10 826	10 705	10 433	–15.1
Malta	1 862	2 338	2 633	2 661	2 799	50.4
Monaco	105	113	82	79	83	–21.1
Netherlands	162 229	172 232	184 567	171 370	168 701	4.0
New Zealand	–12 399	–1 111	1 603	3 594	7 574	–161.1
Norway	24 674	17 863	18 720	16 915	17 378	–29.6
Poland*[b]	453 898	285 609	297 696	289 326	286 189	–36.9
Portugal	42 152	55 376	37 028	34 609	36 583	–13.2
Romania*[b]	191 715	67 165	55 288	62 546	63 290	–67.0
Russian Federation*	2 632 906	1 034 037	996 264	1 035 744	1 076 048	–59.1
Slovakia*	52 721	31 236	31 810	30 994	27 110	–48.6
Slovenia*[b]	14 816	9 846	11 704	11 764	11 300	–23.7
Spain	203 995	276 475	246 492	246 956	242 786	19.0
Sweden	18 361	11 554	17 019	12 786	10 195	–44.5
Switzerland	42 677	43 949	44 976	39 934	42 109	–1.3
Turkey[d]	97 490	175 550	269 000	284 908	297 683	205.3
Ukraine*	649 137	242 663	251 678	298 994	275 503	–57.6
United Kingdom	592 515	553 683	497 008	455 834	475 712	–19.7
United States	4 277 615	5 279 846	4 754 320	4 611 853	4 403 909	3.0
Number of Parties showing a decrease in emissions by more than 1 per cent						*29*
Number of Parties showing a change in emissions within 1 per cent						*0*
Number of Parties showing an increase in emissions by more than 1 per cent						*14*

* A Party with an economy in transition.

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member states.

[c] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.

Table 9

Total anthropogenic CH_4 emissions excluding emissions/removals from land use, land-use change and forestry, 1990, 2000, 2010, 2011 and 2012

	Gg CO_2 equivalent					*Change from 1990*
Party	*1990*	*2000*	*2010*	*2011*	*2012*	*to 2012 (%)*
Australia	115 184	115 036	109 063	110 275	111 709	-3.0
Austria	8 332	6 677	5 562	5 394	5 306	-36.3
Belarus*	15 217	11 422	15 222	15 476	15 391	1.1
Belgium	9 659	8 231	6 661	6 466	6 392	-33.8
Bulgaria*[a]	17 151	8 498	7 318	7 575	7 185	-58.1
Canada	72 003	94 680	88 598	88 579	90 563	25.8
Croatia*	3 697	3 009	3 687	3 626	3 423	-7.4
Cyprus	910	1 186	1 295	1 241	1 304	43.3
Czech Republic*	17 889	11 140	10 369	10 330	10 256	-42.7
Denmark	5 955	5 896	5 642	5 578	5 522	-7.3
Estonia*	1 681	1 027	968	924	932	-44.6
European Union[b]	601 173	495 133	408 801	401 008	398 234	-33.8
Finland	6 170	5 289	4 265	4 122	4 083	-33.8
France	59 751	60 136	53 433	52 133	51 745	-13.4
Germany	108 798	75 074	50 052	48 697	48 706	-55.2
Greece	10 611	11 022	9 899	9 784	9 706	-8.5
Hungary*[a]	12 638	9 314	8 156	7 986	7 990	-36.8
Iceland	437	468	488	473	457	4.6
Ireland	13 674	13 412	11 721	11 692	12 074	-11.7
Italy	43 766	45 850	37 233	35 722	34 747	-20.6
Japan	32 415	25 999	20 695	20 287	20 007	-38.3
Latvia*	3 344	1 609	1 655	1 567	1 631	-51.2
Liechtenstein	14	13	15	15	16	9.9
Lithuania*	5 750	3 164	3 208	3 071	3 051	-46.9
Luxembourg	462	470	447	430	423	-8.4
Malta	73	125	174	166	104	42.3
Monaco	1.84	1.06	0.74	0.74	0.77	-58.4
Netherlands	25 707	19 924	15 940	15 262	14 945	-41.9
New Zealand	26 835	29 479	28 516	28 626	29 038	8.2
Norway	4 960	4 952	4 420	4 283	4 227	-14.8
Poland*[a]	55 875	43 490	41 287	40 503	41 033	-26.6
Portugal	10 203	12 069	11 923	12 113	12 250	20.1
Romania*[a]	46 577	26 415	22 590	22 231	22 237	-52.3
Russian Federation*	593 398	434 602	491 210	506 760	502 547	-15.3
Slovakia*	4 811	4 243	4 089	4 125	4 181	-13.1
Slovenia*[a]	2 165	2 152	1 921	1 916	1 868	-13.7
Spain	26 218	31 841	32 337	32 306	32 318	23.3
Sweden	6 985	6 270	5 047	4 944	4 807	-31.2
Switzerland	4 638	4 017	3 801	3 753	3 718	-19.8
Turkey[c]	34 054	53 683	57 303	58 049	61 623	81.0
Ukraine*	162 352	92 733	66 483	70 388	66 166	-59.2
United Kingdom	109 059	89 118	56 698	54 818	52 784	-51.6
United States	633 202	588 611	580 803	564 340	552 010	-12.8
Number of Parties showing a decrease in emissions by more than 1 per cent						*33*
Number of Parties showing a change in emissions within 1 per cent						*0*
Number of Parties showing an increase in emissions by more than 1 per cent						*10*

* A Party with an economy in transition

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member States.

[c] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.

Table 10

Total anthropogenic CH_4 emissions including emissions/removals from land use, land-use change and forestry, 1990, 2000, 2010, 2011 and 2012

	Gg CO_2 equivalent					Change from 1990
Party	1990	2000	2010	2011	2012	to 2012 (%)
Australia	119 980	117 824	112 662	111 962	115 860	-3.4
Austria	8 333	6 677	5 562	5 394	5 306	-36.3
Belarus*	15 224	11 430	15 227	15 481	15 395	1.1
Belgium	9 660	8 231	6 661	6 472	6 392	-33.8
Bulgaria*[a]	17 153	8 669	7 337	7 596	7 224	-57.9
Canada	75 706	96 849	99 324	99 470	100 823	33.2
Croatia*	3 709	3 059	3 688	3 633	3 445	-7.1
Cyprus	910	1 186	1 297	1 243	1 306	43.5
Czech Republic*	17 985	11 229	10 493	10 384	10 314	-42.7
Denmark	5 955	5 896	5 642	5 578	5 522	-7.3
Estonia*	1 681	1 028	968	925	932	-44.6
European Union[b]	606 683	500 785	413 136	405 372	403 389	-33.5
Finland	6 215	5 340	4 321	4 180	4 140	-33.4
France	60 901	61 720	54 632	53 309	52 886	-13.2
Germany	108 807	75 078	50 056	48 698	48 708	-55.2
Greece	10 652	11 162	9 909	9 798	9 738	-8.6
Hungary*[a]	12 669	9 345	8 179	8 023	8 024	-36.7
Iceland	438	475	496	481	465	6.2
Ireland	13 683	13 420	11 741	11 700	12 076	-11.7
Italy	45 254	46 692	37 547	36 208	35 793	-20.9
Japan	32 423	26 007	20 699	20 292	20 008	-38.3
Latvia*	3 385	1 724	1 714	1 603	1 668	-50.7
Liechtenstein	14	13	15	15	16	9.9
Lithuania*	5 752	3 167	3 209	3 073	3 052	-46.9
Luxembourg	462	470	447	430	423	-8.4
Malta	73	125	174	166	104	42.3
Monaco	1.84	1.06	0.74	0.74	0.77	-58.4
Netherlands	25 714	19 931	15 948	15 270	14 953	-41.8
New Zealand	26 886	29 533	28 590	28 675	29 103	8.2
Norway	4 961	4 952	4 422	4 283	4 227	-14.8
Poland*[a]	58 065	45 696	43 521	42 742	43 305	-25.4
Portugal	10 386	12 234	12 058	12 167	12 419	19.6
Romania*[a]	46 577	26 425	22 591	22 240	22 256	-52.2
Russian Federation*	608 928	450 555	509 581	525 103	520 754	-14.5
Slovakia*	4 822	4 258	4 111	4 147	4 195	-13.0
Slovenia*[a]	2 165	2 152	1 921	1 917	1 873	-13.5
Spain	26 391	31 999	32 401	32 385	32 454	23.0
Sweden	6 987	6 273	5 048	4 946	4 808	-31.2
Switzerland	4 668	4 027	3 810	3 765	3 727	-20.2
Turkey[c]	34 054	53 683	57 303	58 049	61 623	81.0
Ukraine*	162 360	92 736	66 509	70 391	66 187	-59.2
United Kingdom	109 079	89 158	56 739	54 861	52 849	-51.6
United States	635 702	600 114	585 530	578 292	567 279	-10.8
Number of Parties showing a decrease in emissions by more than 1 per cent:						*33*
Number of Parties showing a change in emissions within 1 per cent:						*0*
Number of Parties showing an increase in emissions by more than 1 per cent:						*10*

* A Party with an economy in transition.

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member States.

[c] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.

Table 11

Total anthropogenic N_2O emissions excluding emissions/removals from land use, land-use change and forestry, 1990, 2000, 2010, 2011 and 2012

	Gg CO₂ equivalent					*Change from 1990*
Party	*1990*	*2000*	*2010*	*2011*	*2012*	*to 2012 (%)*
Australia	18 354	25 478	24 452	25 201	25 775	40.4
Austria	6 198	6 291	5 179	5 283	5 222	–15.8
Belarus*	20 127	14 414	15 891	16 640	16 400	–18.5
Belgium	10 900	11 030	8 329	7 037	6 991	–35.9
Bulgaria*[a]	14 633	5 425	4 848	4 798	5 028	–65.6
Canada	49 169	48 645	47 157	45 918	47 733	–2.9
Croatia*	3 954	3 335	3 395	3 504	3 268	–17.4
Cyprus	551	651	613	615	612	11.1
Czech Republic*	13 483	8 768	7 701	7 861	7 727	–42.7
Denmark	9 821	8 091	6 070	6 136	5 992	–39.0
Estonia*	2 244	912	967	972	1 009	–55.0
European Union[b]	527 804	423 115	343 094	340 892	333 639	–36.8
Finland	7 400	6 501	5 438	5 266	5 185	–29.9
France	91 626	78 465	60 600	61 160	57 766	–37.0
Germany	85 321	61 256	54 562	56 846	55 798	–34.6
Greece	10 225	8 641	7 513	7 209	6 811	–33.4
Hungary*[a]	17 089	8 466	6 540	6 824	6 757	–60.5
Iceland	521	495	453	448	458	–12.1
Ireland	9 112	9 485	7 837	7 288	7 417	–18.6
Italy	37 462	39 561	27 129	26 889	27 754	–25.9
Japan	29 728	27 491	20 770	20 494	20 231	–31.9
Latvia*	3 816	1 410	1 748	1 735	1 816	–52.4
Liechtenstein	13	12	13	13	13	–2.1
Lithuania*	7 186	4 620	4 020	4 352	4 144	–42.3
Luxembourg	476	481	474	482	471	–1.1
Malta	52	71	57	57	58	11.3
Monaco	1.78	3.44	2.75	2.73	2.93	65.0
Netherlands	19 992	17 412	9 346	9 281	9 061	–54.7
New Zealand	8 246	9 787	10 385	10 644	10 886	32.0
Norway	5 043	4 727	3 194	3 203	3 200	–36.5
Poland*[a]	44 487	32 337	29 716	30 031	29 590	–33.5
Portugal	5 551	6 033	4 808	4 513	4 479	–19.3
Romania*[a]	28 113	13 440	12 418	12 683	11 586	–58.8
Russian Federation*	223 272	112 704	113 401	116 945	115 949	–48.1
Slovakia*	6 339	3 569	3 402	2 862	2 796	–55.9
Slovenia*[a]	1 388	1 426	1 109	1 107	1 107	–20.3
Spain	26 632	31 119	25 949	24 557	24 019	–9.8
Sweden	8 114	7 264	6 670	6 271	6 191	–23.7
Switzerland	3 478	3 123	3 094	3 028	3 022	–13.1
Turkey[c]	12 217	17 143	14 150	13 728	14 787	21.0
Ukraine*	58 726	26 140	28 762	31 869	31 367	–46.6
United Kingdom	69 081	47 539	37 089	35 709	35 411	–48.7
United States	395 512	384 139	403 606	403 931	395 794	0.1
Number of Parties showing a decrease in emissions by more than 1 per cent						*36*
Number of Parties showing a change in emissions within 1 per cent						*1*
Number of Parties showing an increase in emissions by more than 1 per cent						*6*

* A Party with an economy in transition

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member States.

[c] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.

Table 12

Total anthropogenic N_2O emissions including emissions/removals from land use, land-use change and forestry, 1990, 2000, 2010, 2011 and 2012

	Gg CO₂ equivalent					*Change from 1990*
Party	*1990*	*2000*	*2010*	*2011*	*2012*	*to 2012 (%)*
Australia	20 309	26 733	26 416	26 219	27 489	35.4
Austria	6 218	6 310	5 202	5 307	5 247	–15.6
Belarus*	20 145	14 435	15 909	16 657	16 416	–18.5
Belgium	10 913	11 078	8 423	7 201	7 098	–35.0
Bulgaria*[a]	14 749	5 580	4 968	4 919	5 153	–65.1
Canada	51 365	49 837	53 756	52 588	53 871	4.9
Croatia*	3 963	3 349	3 403	3 515	3 284	–17.1
Cyprus	553	655	630	630	635	14.7
Czech Republic*	13 504	8 784	7 719	7 872	7 739	–42.7
Denmark	9 838	8 106	6 082	6 149	6 005	–39.0
Estonia*	2 246	914	974	979	1 016	–54.7
European Union[b]	533 400	429 612	349 747	347 686	340 596	–36.1
Finland	8 650	7 782	6 765	6 595	6 510	–24.7
France	93 000	80 705	62 860	63 501	60 177	–35.3
Germany	85 724	61 662	55 035	57 338	56 307	–34.3
Greece	10 229	8 655	7 514	7 210	6 814	–33.4
Hungary*[a]	17 097	8 511	6 579	6 865	6 800	–60.2
Iceland	589	567	532	527	538	–8.8
Ireland	9 140	9 530	7 907	7 361	7 493	–18.0
Italy	37 808	39 765	27 264	27 059	28 016	–25.9
Japan	29 800	27 521	20 777	20 500	20 236	–32.1
Latvia*	3 973	1 625	1 974	1 958	2 037	–48.7
Liechtenstein	13	12	13	13	13	–2.1
Lithuania*	7 234	4 679	4 059	4 393	4 191	–42.1
Luxembourg	479	484	476	484	473	–1.2
Malta	52	71	57	57	58	11.3
Monaco	1 80	3 46	2.77	2.75	2 95	64.1
Netherlands	20 005	17 465	9 428	9 367	9 150	–54.3
New Zealand	8 259	9 806	10 408	10 664	10 907	32.1
Norway	5 057	4 757	3 239	3 247	3 245	–35.8
Poland*[a]	44 816	32 670	30 255	30 571	30 135	–32.8
Portugal	5 939	6 189	4 905	4 595	4 588	–22.8
Romania*[a]	28 114	13 444	12 418	12 686	11 594	–58.8
Russian Federation*	244 787	133 210	133 951	137 550	136 452	–44.3
Slovakia*	6 404	3 597	3 416	2 876	2 808	–56.2
Slovenia*[a]	1 402	1 440	1 123	1 121	1 121	–20.0
Spain	26 667	31 331	26 160	24 753	24 206	–9.2
Sweden	8 190	7 330	6 795	6 377	6 290	–23.2
Switzerland	3 489	3 128	3 098	3 032	3 025	–13.3
Turkey[c]	12 217	17 143	14 150	13 728	14 787	21.0
Ukraine*	58 738	26 152	28 782	31 883	31 382	–46.6
United Kingdom	69 924	48 391	37 789	36 383	36 080	–48.4
United States	398 603	395 082	409 322	417 200	410 076	2.9
Number of Parties showing a decrease in emissions by more than 1 per cent						*35*
Number of Parties showing a change in emissions within 1 per cent						*0*
Number of Parties showing an increase in emissions by more than 1 per cent						*8*

* A Party with an economy in transition

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member States.

[c] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.

Table 13

Total aggregate anthropogenic emissions of HFCs, PFCs and SF_6, 1990, 2000, 2010, 2011 and 2012

	Gg CO_2 equivalent					*Change from 1990*
Party	*1990*	*2000*	*2010*	*2011*	*2012*	*to 2012 (%)*
Australia	5 298	2 678	7 332	7 906	8 333	57.3
Austria	1 539	1 317	1 701	1 731	1 798	16.9
Belarus*		9.75	15.52	2.36	2.27	
Belgium	3 404	1 445	2 192	2 372	2 477	–27.2
Bulgaria*[a]	3	25	385	425	468	–
Canada	10 698	10 299	9 139	9 425	9 783	–8.6
Croatia*	948	183	482	495	495	–47.7
Cyprus		29	250	259	261	
Czech Republic*	79	292	1 797	2 017	2 181	2 655.4
Denmark	44	690	874	862	805	1 711.3
Estonia*		72	155	162	169	
European Union[b]	60 254	67 424	91 350	93 921	95 234	58.1
Finland	115	568	1 205	1 069	964	738.3
France	10 237	10 917	17 047	17 869	18 040	76.2
Germany	11 864	12 521	12 373	12 710	12 862	8.4
Greece	1 102	4 353	3 715	3 494	4 005	263.6
Hungary*[a]	342	644	1 275	1 366	1 161	239.8
Iceland	421	164	273	188	229	–45.5
Ireland	36	631	1 045	1 053	1 029	2 753.1
Italy	3 171	3 549	10 003	10 610	10 916	244.3
Japan	31 040	35 572	23 563	25 106	27 269	–12.1
Latvia*		6	85	87	97	
Liechtenstein	0.00	3.04	7.96	8.05	8.38	–
Lithuania*		14	198	228	245	
Luxembourg	13	31	74	75	76	475.3
Malta	0	10	123	136	172	–
Monaco	0.47	4.92	6.42	7.15	6.56	1 309.4
Netherlands	6 915	5 767	2 650	2 462	2 402	–65.3
New Zealand	645	322	1 139	1 865	1 866	189.2
Norway	5 570	2 580	1 195	1 237	1 205	–78.4
Poland*[a]	128	1 528	6 849	7 485	7 784	6 002.7
Portugal		252	1 411	1 537	1 713	
Romania*[a]	3 350	1 362	911	995	1 081	–67.7
Russian Federation*	41 293	29 017	14 305	12 459	19 775	–52.1
Slovakia*	271	102	461	478	495	82.4
Slovenia*[a]	287	162	245	262	261	–8.8
Spain	3 391	9 018	8 517	8 102	7 835	131.1
Sweden	488	902	1 079	1 064	899	83.9
Switzerland	244	728	1 330	1 400	1 502	516.0
Turkey[c]	603	1 656	5 193	6 579	5 965	888.5
Ukraine*	203	114	691	726	738	263.0
United Kingdom	13 773	11 111	14 433	14 710	14 739	7.0
United States	90 205	139 797	157 562	165 342	165 040	83.0
Number of Parties showing a decrease in emissions by more than 1 per cent.						*10*
Number of Parties showing a change in emissions within 1 per cent.						*0*
Number of Parties showing an increase in emissions by more than 1 per cent.						*27*

* A Party with an economy in transition

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member States.

[c] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.

Table 14

Net anthropogenic CO_2 emissions and removals from land use, land-use change and forestry, 1990, 2000, 2010, 2011 and 2012

	Gg CO_2 equivalent					*Change from 1990*
Party	*1990*	*2000*	*2010*	*2011*	*2012*	*to 2012 (%)*
Australia	123 771	19 171	23 027	–63 354	9 297	–92.5
Austria	–9 898	–15 250	–3 917	–7 895	–3 864	–61.0
Belarus*	–28 599	–30 932	–30 203	–29 255	–25 521	–10.8
Belgium	–848	–641	–1 360	–1 338	–1 488	75.4
Bulgaria*[a]	–13 905	–8 663	–8 409	–8 536	–8 371	–39.8
Canada	–76 919	–54 874	58 418	59 248	24 463	–131.8
Croatia*	–6 531	–7 642	–7 016	–6 167	–5 929	–9.2
Cyprus	–142	–155	–77	–92	–44	–68.6
Czech Republic*	–3 555	–7 385	–5 325	–7 078	–7 323	106.0
Denmark	5 266	3 221	–335	–2 754	–850	–116.1
Estonia*	–8 822	1 803	–4 586	–2 890	–1 958	–77.8
European Union[b]	–269 426	–314 556	–322 664	–322 615	–315 665	17.2
Finland	–14 970	–20 503	–25 475	–25 500	–27 234	81.9
France	–31 144	–29 317	–40 225	–43 219	–47 806	53.5
Germany	–24 930	–24 377	–5 171	–4 579	–3 999	–84.0
Greece	–2 160	–2 161	–2 866	–2 947	–2 901	34.3
Hungary*[a]	–2 594	–686	–4 001	–3 721	–4 483	72.8
Iceland	1 105	936	704	658	618	–44.1
Ireland	–2 350	–891	–3 948	–3 719	–3 223	37.1
Italy	–5 443	–18 020	–31 567	–19 794	–19 864	264.9
Japan	–66 898	–85 687	–72 368	–75 599	–75 072	12.2
Latvia*	–20 064	–14 421	–11 416	–12 090	–12 559	–37.4
Liechtenstein	–9.47	–8.60	–7.16	–7.04	–6.93	–26.9
Lithuania*	–4 344	–9 449	–10 521	–10 618	–8 124	87.0
Luxembourg	345	–388	–429	–433	–437	–226.7
Malta	–5.21	–6.76	–7.27	–7.32	–7.22	38.6
Monaco	–0.03	–0.04	–0.04	–0.04	–0.04	13.9
Netherlands	2 993	2 311	3 216	3 311	3 439	14.9
New Zealand	–37 315	–32 422	–31 847	–29 665	–26 684	–28.5
Norway	–10 162	–23 938	–26 817	–27 657	–26 723	163.0
Poland*[a]	–15 516	–33 141	–31 927	–38 396	–34 672	123.5
Portugal	–2 860	–10 370	–15 464	–16 546	–13 727	379.9
Romania*[a]	–15 292	–25 692	–24 591	–23 058	–20 571	34.5
Russian Federation*	127 526	–442 962	–606 162	–612 385	–580 726	–555.4
Slovakia*	–9 084	–9 796	–5 621	–6 239	–8 128	–10.5
Slovenia*[a]	–1 540	–5 368	–4 433	–4 414	–4 375	184.1
Spain	–23 513	–31 551	–33 885	–33 967	–33 851	44.0
Sweden	–38 781	–42 580	–35 264	–35 696	–35 518	–8.4
Switzerland	–1 962	–3	–948	–1 914	–1 142	–41.8
Turkey[c]	–44 070	–50 059	–57 848	–60 826	–59 815	35.7
Ukraine*	–69 757	–50 846	–37 986	–6 471	–27 246	–60.9
United Kingdom	1 015	–2 985	–7 989	–8 202	–7 712	–859.5
United States	–822 991	–683 217	–958 437	–971 527	–971 094	18.0
Number of Parties showing a decrease in emissions by more than 1 per cent						*21*
Number of Parties showing a change in emissions within 1 per cent						*0*
Number of Parties showing an increase in emissions by more than 1 per cent						*22*

* A Party with an economy in transition

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member States.

[c] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.

Table 15

Anthropogenic CH_4 emissions from land use, land-use change and forestry, 1990, 2000, 2010, 2011 and 2012

	Gg CO_2 equivalent					*Change from 1990*
Party	*1990*	*2000*	*2010*	*2011*	*2012*	*to 2012 (%)*
Australia	4 796	2 788	3 600	1 687	4 150	–13.5
Austria	0.58	0.12	0.14	0.13	0.16	–72.5
Belarus*	7.08	8.16	4.82	4.45	4.63	–34.6
Belgium	0.48	0.00		6.26		
Bulgaria*[a]	1	171	19	21	39	2 723.7
Canada	3 703	2 170	10 726	10 891	10 260	177.0
Croatia*	13	49	1	7	22	73.9
Cyprus	0.27	0.45	2.01	1.70	2.63	868.9
Czech Republic*	96	89	123	54	59	–39.3
Denmark	0.55	0.00	0.01	0.01	0.02	–95.5
Estonia*	0.39	1.68	0.13	0.12	0.07	–82.4
European Union[b]	5 510	5 652	4 335	4 365	5 155	–6.4
Finland	46	50	56	57	57	25.2
France	1 150	1 584	1 200	1 176	1 141	–0.8
Germany	8.59	3.65	3.54	1.46	1.85	–78.4
Greece	41	139	10	14	32	–22.1
Hungary*[a]	31	31	23	37	34	9.8
Iceland	1.60	7.80	8.34	8.33	8.34	421.3
Ireland	9.29	7.98	20.44	7.58	1.92	–79.4
Italy	1 488	842	313	486	1 046	–29.7
Japan	8.51	7.78	4.14	5.35	1.59	–81.3
Latvia*	41	115	60	37	37	–8.6
Liechtenstein						
Lithuania*	2.30	2.95	1.04	1.95	0.81	–64.8
Luxembourg						
Malta						
Monaco						
Netherlands	6.80	7.77	7.90	7.91	7.92	16.5
New Zealand	51	53	74	50	65	27.3
Norway	1.11	0.17	1.62	0.22	0.09	–92.3
Poland*[a]	2 190	2 207	2 234	2 239	2 272	3.8
Portugal	184	165	135	54	169	–7.8
Romania*[a]	0.26	10.15	0.58	8.61	18.64	7 022.6
Russian Federation*	15 529	15 953	18 370	18 343	18 207	17.2
Slovakia*	11	15	22	22	13	22.4
Slovenia*[a]		0.75	0.40	1.23	4.62	
Spain	173	158	63	79	136	–21.5
Sweden	1.72	2.95	0.71	2.13	0.95	–44.6
Switzerland	30.33	9.73	9.51	12.23	9.45	–68.8
Turkey[c]	0.04	0.07	0.01	0.01	0.04	0.5
Ukraine*	8.39	3.44	25.33	2.49	21.01	150.5
United Kingdom	21	40	41	43	65	214.4
United States	2 500	11 504	4 727	13 952	15 269	510.7
Number of Parties showing a decrease in emissions by more than 1 per cent.						*19*
Number of Parties showing a change in emissions within 1 per cent.						*2*
Number of Parties showing an increase in emissions by more than 1 per cent.						*16*

* A Party with an economy in transition.

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member States.

[c] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.

Table 16

Anthropogenic N_2O emissions from land use, land-use change and forestry, 1990, 2000, 2010, 2011 and 2012

	Gg CO_2 equivalent					Change from 1990
Party	*1990*	*2000*	*2010*	*2011*	*2012*	*to 2012 (%)*
Australia	1 955	1 255	1 964	1 018	1 714	–12.3
Austria	20	19	24	24	25	23.6
Belarus*	18	21	19	16	16	–9.9
Belgium	13	48	94	164	106	707.0
Bulgaria*[a]	116	155	120	121	125	7.3
Canada	2 196	1 192	6 599	6 670	6 138	179.5
Croatia*	8	15	9	11	16	89.7
Cyprus	2	4	17	15	23	868.9
Czech Republic*	21	16	19	12	12	–40.5
Denmark	16	14	13	13	13	–19.7
Estonia*	1 50	1 78	6 64	6 81	6 97	363.3
European Union[b]	5 596	6 497	6 654	6 794	6 957	24.3
Finland	1 249	1 281	1 327	1 329	1 325	6.0
France	1 374	2 240	2 259	2 341	2 411	75.5
Germany	403	405	473	491	510	26.4
Greece	4 19	14 17	1 07	1 46	3 30	–21.3
Hungary*[a]	8	46	39	42	43	414.9
Iceland	69	73	79	79	80	15.9
Ireland	28	45	70	72	76	168.7
Italy	346	204	134	170	262	–24.5
Japan	72 02	30 40	6 66	6 01	4 70	–93.5
Latvia*	157	215	226	223	221	40.6
Liechtenstein	0.01	0.01	0.01	0.01	0.02	49.1
Lithuania*	48	58	39	42	47	–2.4
Luxembourg	2 85	2 82	2 53	2 49	2 45	–14.0
Malta						
Monaco	0.02	0.02	0.02	0.02	0.02	–18.1
Netherlands	13	53	82	85	89	575.2
New Zealand	13	19	23	20	21	58.5
Norway	14	31	45	45	45	225.3
Poland*[a]	329	334	539	540	545	65.9
Portugal	388	156	97	83	109	–72.0
Romania*[a]	0.14	4.22	0.55	3.81	7.93	5 557.1
Russian Federation*	21 516	20 506	20 550	20 605	20 502	–4.7
Slovakia*	65	27	14	14	12	–81.5
Slovenia*[a]	14	14	14	14	15	5.2
Spain	35	212	211	197	187	427.7
Sweden	76	66	126	107	99	29.6
Switzerland	10 54	4 94	3 89	4 42	3 67	–65.2
Turkey[c]	0.00	0.01	0.00	0.00	0.00	2.5
Ukraine*	12	12	20	13	15	25.5
United Kingdom	843	852	700	674	669	–20.6
United States	3 091	10 943	5 716	13 269	14 282	362.0
Number of Parties showing a decrease in emissions by more than 1 per cent						*15*
Number of Parties showing a change in emissions within 1 per cent						*0*
Number of Parties showing an increase in emissions by more than 1 per cent						*27*

* A Party with an economy in transition.

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Union (EU) are as reported for the EU-28 and are reported separately from those of its member States.

[1] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place it in a situation different from that of other Parties included in Annex I to the Convention.